HIV/AIDS in India:-

Sociological Study of Causes and Consequences

Dissertation submitted in partial fulfilment

of the requirements

for the award of the degree of

Master in Philosophy

in

Sociology

By

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Under the supervision of

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DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK
ALIGARH MUSLIM UNIVERSITY
ALIGARH (INDIA)

2007

DEDICATED

TO MY

PARENTS

&

ELDER BROTHER

ARVIND PANDEY

"Form the Greatest
Source of Inspiration
Whom I have Always Felt
Supporting and Motivating,
Meet Every Step since
My Childhood"

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AND SOCIAL WORK
ALIGARH MUSLIM UNIVERSITY
ALIGARH—202002

D.No.....

Dated....06.06.2007.....

TO WHOM IT MAY CONCERN

This is to certify that **Ms. Seema Kumari**, Research Scholar has done her M.Phil. under my supervision on the topic "Aids in India : A Sociological Study of Causes and Consequences" and has completed the requirement of the Academic Ordinances. This is her original work and suitable for the submission of M.Phil. degree in Sociology.

(PROF. NOOR MOHAMMAD)
SUPERVISOR
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Preface

World is a beautiful place and so, is the experience of living in it. It would be tragic if this beautiful experience of living life is shortened by HIV/AIDS, and when its prevention is within one's control, though not the cure.

"The goal of realising human rights is fundamental to the global fight against AIDS. And in a world facing a terrible epidemic one that has already spread further, faster and to more devastating effect than any other in human history-winning the fight against AIDS is a precondition for achieving rights worth enjoying".— According to **Dr. Peter Piot, UNAIDS Executive Director**

The **"human immunodeficiency virus"** (HIV), which causes **"acquired immunodeficiency syndrome"** (AIDS), is the leading infectious cause of adult deaths in the world. Experiences in different countries show that HIV can be prevented with high political commitment, adequate human and financial resources, and sustained interventions. It is well recognised that the impact of HIV/AIDS epidemic in the developed and developing countries differs. With the availability of new drugs, clinical management of HIV has improved remarkably, enabling AIDS patients in developed countries to survive longer. However, these facilities are still beyond the reach of those in

the developing world, calling for innovative approaches to enhance access to antiretroviral therapy and their use in India. The new **'3 by 5'** WHO initiative to enhance HIV treatment access thus assumes greater significance. In order to use these new approaches more effectively, rationally and equitably, there is a need for better understanding of the changing epidemiology of HIV infection and the responses to the epidemic at the country level.

India is among the worst affected nations in the world in term of the HIV/AIDS epidemic. Whether it is India or south Africa that has the largest number of HIV positive persons is putting too fine a point on what is clearly a very grim situation.

As the twentieth century drew to a close and mankind entered into a new millennium, the world witnessed a lot of spectacular events celebrated with magnanimous enthusiasm and joy. Indeed, it was time to celebrate because as mankind we have achieved a lot in terms of growth and development. But for the families of a few million people, there were no celebrations, no any excitements, no any happiest moments at all because they had lost their dear and near ones to AIDS (Acquired immune Deficiency syndrome). But, unfortunately, even today AIDS is still continuing to take its toll of human lives rather very harshly necessitating the setting up of the millennium achievement goal to halt and reverse the epidemic by 2015.

One thing is unique about HIV/AIDS in India, that, is, its combination of the medical nature of the disease that is incurable, the main route of transmission (unprotected sex), the social exclusion spin-offs (stigma,

discrimination), on the fact that the epidemic's spread in the country is fuelled by poverty, illiteracy and lack of education and knowledge, unemployment, migration and the relative powerlessness of women with men.

This study, focused on India, is in recognition of the tremendous importance of HIV/AIDS as an unprecedented health and development threat in India. It highlights the causes, and consequence of HIV/AIDS in the social and economic context.

The present study concluded with the crucial theme that awareness; care treatment of the communities can lead them to a positive beginning directed towards safe behaviour.

The dissertation is mainly focuses upon the health hazards. Because HIV/AIDS is mainly a health problem with a social problem.

The personal and social tragedy of the AIDS crisis touches virtually everyone. AIDS is not purely a medical problem, its has social economic and ethical dimensions as well. Nobody can deny the fact that the rising trend of promiscuity has been the biggest factor in the phenomenal spread of HIV/AIDS. While promiscuity is an abominable practice in almost all the religions of the world. It threatens the basic social institutions at the individual, family, and community levels. Its social and economic consequences are equally serious as it could claim up to half of national expenditure for health if the needs of HIV/AIDS patients were to be fully met.

The dissertation consist of six chapters: Chapter first deals with the origin and rise of HIV/AIDS by focusing the meaning and diagnosis of HIV/AIDS.

The second chapter examines the review of literature.

The third chapter examines the core drivers of the epidemic in India. In order to understand the scale of India's HIV-led crisis, one must proceed from the fact that it is more complex, multi-faceted and influenced by many medical, social, economic and cultural factors. Though it has much in common with other infectious diseases, it also presents relatively unusual features. This chapter also deals the most vulnerable groups in India and which states are most affected by HIV/AIDS in India.

The chapter four makes the impact of HIV/AIDS on society and people. This chapter deals the impact of HIV/AIDS on children, adult mortality, community, life expectancy, families, orphan, human resources, health, sectors, the productive sectors, the macro-economic and so on.

The fifth chapter highlights the role that civil society organizations are playing to provide support for people living with HIV and AIDS (PLWHA) within their communities. This chapter also deals with remedial like, treatment, prevention and awareness of HIV/AIDS. Which drugs are useful in HIV/AIDS and what are the preventions should be taken to stop HIV/AIDS. A central argument of the chapter is that interventional strategies need to be rooted in community responses, both to understand the impact of the epidemic and to

change their individual and organization approaches to support community action.

The last chapter is conclusion, that discusses to briefly all the previous chapters of the dissertation. In this chapter suggestion and limitation of the study and some preventive measures have also been described.

Acknowledgement

First and foremost, I am grateful, to God for bestowing on me the courage to carryout this dissertation programme.

An acknowledgement of all that one has received from ones near and dear ones in terms of love and affection, sympathy and empathy and inspiring smiles and encouraging glances is impossible of formulation in ordinary discourse. However, we have to make do with ordinary speech what can be communicated only in extraordinary term. Words are to shaky to carry the load of feelings that originate from the depths of ones being. Furthermore, they are often inclined to conceal more and reveal less. Nevertheless, the following words, their limitations notwithstanding, would be in order:

My teacher and the supervisor of this dissertation Professor ***Noor Mohammad****, Department of Sociology and Social work, A.M.U., Aligarh, has been an unfailling source of inspiration and affection. His deep understanding of sociological investigations and his vast experience of theoretical and empirical research, have oriented and conditioned if not determined the formulations arrived at in this dissertation. Despite his tight and busy academic and administrative schedule, he has been kind enough to spare time and guide me during my M. Phil programme. Words fail me in expressing the debt of gratitude that I own to him, I am deeply beholden to him from the core of my heart.*

My elder Brother ***Mr. M. K. Pandey****, despite his financial constraints have joyfully borne the brunt of providing me the necessary where withal to carry on my studies. Present dissertation is nothing but an encapsulation of his blessings. My*

elder brother ***Arvind Pandey*** *has stood me through thick and thin. It is my pleasure and privilege to register my thanks to them all.*

Mohd. Tahir Sir, *(M. S. W), Deptt. of Sociology and social work, A.M.U., Aligarh, has encouraged and inspired me during the preparation of this dissertation. My sincere thanks to all members of Maulana Azad library and seminar library, to* ***Dr. Ibn*** *in helping me to locate books journals and other reference material.*

I would also like to express my personal gratitude to ***Mr. Fardeen Abbasi (Guddu)*** *for his inspiration. Without his complete and honest involvement, this endeavour would not have been possible. I am indeed, indebted to him, and I am greatful to him all from the deeps of my heart.*

Heartfelt thanks to all my friends, ***Mamta Yadav, Syed Aisha Izhar, Khan Faraha Siraz, Anjum Arshi*** *and* ***Muzahid Ali*** *have always been kind, courteous and helpful and obliged me whenever I needed their company.*

My thanks are due to ***Mr. Mazhar Hussain*** *for his efficient and careful typing of the dissertation.*

God alone is besought for help and on Him alone we depend.

Seema Kumari

(SEEMA KUMARI)

Abbreviations

AIDS	:	Acquire Immunodeficiency Syndrome
ART	:	Anti – Retroviral Therapy
ARV	:	Anti – Retroviral
CDC	:	Centre for Disease Control and Prevention
CSW/s	:	Commercial Sex-Workers
GDP	:	Gross Domestic Product
GIPA	:	Greater Involvement of people living with or Affected by HIV/AIDS
HAART	:	Highly Active Anti Retroviral Therapy
HIV	:	Human Immuno Deficiency Virus
HIV^+	:	HIV Positive
HIV^-	:	HIV Negative
ICMR	:	Indian Council of Medical Research
IDUs	:	Injecting Drug Users
IEC	:	Information Education and Communication
IHO	:	Indian Heealth Organisation
ILO	:	International Laabour Organisation
Int. Pd	:	Intervention Period
IPC	:	Indian Penal Code
KABP	:	Knowledge, Attitude, Behaviour and Practices
MSM	:	Men who have Sex with Men
MTCT	:	Mother-to-Child Transmission
NAC	:	National AIDS Committee
NACB	:	National AIDS committee Board
NACO	:	National AIDS Control Organisation
NACP/s	:	National AIDS Control Programmes
NGO/s	:	Non-governmental Organisations
PEP	:	Post-Exposure Prophylaxis

PWHA	:	People with HIV/AIDS
PLWHA	:	People living with HIV/AIDS
SPPC	:	Strategic Plan for Prevention and Control
STDs	:	Sexually Transmitted Diseases
STIs	:	Sexually Transmitted Infections
SVCP	:	Special Virus Cancer Programme
UN	:	United Nations
UNAIDS	:	Joint United Nations Programme on HIV/AIS
UNDCP	:	United Nations International Drug Control Programme
UNDP	:	United Nations Development Programme
UNESCO	:	United Nations Educational, Scientific Control Organisation
UNFPA	:	United Nations Population Fund
UNICEF	:	United Nations Children`s Fund
USAID	:	United Sates Agency for International Development
UTA	:	Universities Talk AIDS
VCT	:	Voluntary Counselling and Testing
WBC	:	White Blood Cells
WHO	:	World Health Organisation
YUVA	:	Youth Unite for Victory on AIDS.

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CHAPTER – 1

Introduction of HIV/AIDS

CHAPTER- I

AN INTRODUCTION OF HIV/AIDS

Life is inseparable from illness and even it exists in all species even in bacteria and at the molecular level. Illness is a subject matter coming within the scope of biology, medicine, biochemical, anatomy psycho-biology, psychosomatic and psychopatholgy. Over centuries people learned and who tried to study illness had no other means of doing so than to describe what they saw, recorded and what the patients said about their feelings, treat this collections by knowledge as an entity and give it a name. Disorders of human machine are caused in most cases by the virus, a bacterium or a parasite. These are the external agents that have entered the body by some means or other and cause troubles.

Human race from time to time was put into untold miseries and mass death incidence due to highly infectious diseases, it is noted or recorded in the history that diseases like plague, cholera, flue yellow fever, tuberculosis, cancer etc, had played a havoc in the glob in the past. Like this, new scientific inventions and discoveries about fatal diseases are also emerging at time. HIV/AIDS is one of the fatal disease which has been identified by the scientists recently. It is a dreadful and highly infectious disease that spreads very fast in human race with dire consequences. Informations reveal that it is threatening and breaking the nations boundaries.

AIDS, the acquired immuno-deficiency syndrome (some times called slim disease) is fatal illness caused by a retrovirus known as the human immunodeficiency virus (HIV) and it is an extraordinary kind of crisis, it is both an emergency and a long – term development issue. HIV/ AIDS is a new type of disease, which is spreading all over the world. This may be considered as greatest threats to global development, stability and a long – term humanitarian crisis of unprecedented proportions. The nature and effects of AIDS are unique in the sense that the epidemic remains extremely dynamic, growing and changing opportunities for transmission. Since its diagonosis, more than 60 million people worldwide have been infected with this virus . 20 million deaths since the first AIDS diagnosis in 1981, spreading in the world at the rate by new infection world has been spared for this particular disease and further it is not confined to any one class , community , religion , age group sex or profession. It is the fourth largest cause of mortality world wide, ranking just below heart disease and cerebo – vascular disease and acute lower respiratory tract infections.

It is not only the problem of health, it is a problem of society and after that it is called a social problem. From a sociological point of view it is a social problem because society is suffering because this disease and causing a mental among people. Above all the history of HIV/AIDS, how it came into being and what are its causes, from where HIV/AIDS came, what is the origin of HIV/AIDS, there are various questions, we will try to answer these questions and will try to answer its social consequences.

1.1 RISE OF HIV/AIDS

The rise of HIV/AIDS can be traced back from this quotation. "It was midnight, Friday June 27, 1969 and New York city's finest were preparing to raid a gay bar at 53 Christopher street in green winch village. Patrons were being led out into a warm and festive atmosphere

(as if in celebration of the life and death the previous day of Judy garland, a gay favorite) until the paddy wagons arrived. As the police got rough, one self-proclaimed "bull dyke" punched a cop and knocked him out cold. Then all hell broke loose. That night and the following saw melees unlike anything before gay men, lesbians, transvestites. and bisexuals all had taken arms against a sea of troubles. These work the stone wall Riots by some and the stonewall rebellion by most gay historians.

A sea change is what it was; from that time forward gay sexuality was in the open the fast lame became crowded. Where gay men had assumed fixed classical roles, as is anal intercourse where one partner was always dominant and the other always submissive, they now freely inter changed roles and relished it. Sex clubs, bathhouses and meat racks were all open thriving. A typical visit to such establishment resulted in an average of 2.7 sexual encounters. Many, if not most, were anonymous. Sex with multiple partners (as in many hundred and even thousands) was the norm, abstinence was unheard of oral-genital oral-

anal, genital anal etc., nothing was barred what had been closed groups of sexual partner broke down as they shared experiences with partners from beyond the small circles of their friends. Anonymous sex was everywhere. Sado masochism, and leather were all the rage.

As the rate of casual sex skyrocketed, so too did the rates of sexually transmitted diseases (STDs), Gonorrhea reports tripled and syphilis reports quadrupled between 1965 and 1975. On August 27.1976, the CDC reported two cases of penicillin resistant gonorrhea, called PPNG, for penicillinase producing Neisseria (area) gouorrhea. By October there were 10 more cases. Even as far away as Liverpool, England, 40 cases were reported. One third of all new cases were coming from service men returning from the Philippines. By May 1977, PPNG had been detected in seventeen countries and the US had 150 cases, most in New York City. Not only PPNG, but herpes simplex II HSV-II and new strains of gonorrhea and syphilis were running wild.

Gay men were especially susceptible to these new classes of STDs. Entamoeba histolytic, normally a third world infection, was being commonly found in the bowels of gay men who lived in the fast lane. The general name for this was Gay Bowel syndrome".

In his book, surviving AIDS (New York: HarperCollins 1990) pop singer Michael callen wrote.

"I Calculated that since becoming sexually active in 1973, I had racked up more than three thousand different sexual partners in bathhouses, back rooms, meat racks, and tearooms. As a consequence I also had the following sexually transmitted diseases, many more than once: hepatitis A, hepatitis B, non-A/non-B hepatitis, herpes simplex types I and II, venereal warts, giardia, lamblia and entamoeba histolytica, shigella flexner and salmonella. syphilis. gonorrhea nonspecific urethritis, Chlamydia, cytomegalovirus (CMV) and Epstein Barr virus (EBV) mononucleosis and eventually cryptosporidiosis".[1]

1.2. THE SECRET ORIGIN OF AIDS AND HIV

There are some secret origin of AIDS and HIV as follows:-

a) The Green monkey theory

b) The special virus cancer program (1962-1977)

c) Biological warfare, primate research and the SVCP.

d) The end of the SVCP and the birth of AIDS.

e) The Pre-AIDS gay hepatitis B experiments (1978-1981).

(a) THE GREEN MONKEY THEORY

Many people have heard the theory that AIDS is man-made, thirty percent of New York city blacks polled by the New York Times (October 29,1990) actually believe AIDS is an "ethnic weapon"

[1] http://uhavax.hartford.edu/bugl/rise.htm

designed in a laboratory to infect and kill black people. Some people even think the AIDS conspiracy theory is more plausible than the African Green monkey theory promoted by the leading AIDS scientist. In a media blitz in 1999, the green monkey theory was totally replaced by the chimpanzee "out of African" theory and the chimp origins of AIDS was fully accepted by the scientific community[1]

A Phylogenetic "family tree" of primate viruses was presented to prove that HIV was descended from a primate virus in the African bush. Analysis of virus genetic data performed by the "supercomputer" at Los Alamos in New Mexico indicated that HIV had "Jumped species" from a chimp to a human around the year 1930 in Africa[2]

(b) THE SPECIAL VIRUS CANCER PROGRAM (1962-1977)

Conveniently forgotten by scientists and medical journalists was the fact that surgeons had been transplanting chimpanzee parts into human beings for decades. When keith Reemtsma died in June 2000 at age 74, he was died as a pioneer in cross-species organ transplants (now Known as Xenotransplantation). By 1964 he had already placed six chimpanzee kidneys into six patients. All his patients died, but

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1 Butel Js: simian Virus 40, poliovirus vaceines and human caucer· research progress versus media and public interests. Bulletin world heath organist 78: 195-198, 2000.

2 Cantwell ARjr: Aids and the doctors of death: an Iquiry into the origin of the AIDS epi-demic, LOS angeles: Aries rising Press, 1988.

eventually Reemtsma succeeded in many successful human- to- human organ transplants.[1]

Much more likely to have spread animal viruses to human beings is the largely forgotten special virus cancer Program (SVCP).

This research program was responsible for the development the seeding and the deployment of various animal viruses, which were capable of producing cancer and immune system damage when transferred between animal species and into human cells and tissue. The SVCP marshaled many of the nation's finest virologists, biochemists. immunologists, molecular biologists, and epidemiologists, at the most prestigious institutions in a coordinated attempt to assess the role of viruses in causing human cancer. Many of the top AIDS scientists, including Dr. Robert Gallo (the co-discover of HIV), Myron (Max) Essex (of "cat AIDS" fame) and peter Dues berg (who claims HIV is not the cause of AIDS), were connected with the Program.[1]

(c) BIOLOGICAL WARFARE PRIMATE RESEARCH AND THE SVCP

On October 18, 1971, President Richard NIXON announced that the army's biowarfare laboratories at nearby Fort detrick, Maryland, would be converted to research on the cause, prevention and treatment of cancer. As part of Nixon's so-called war on cancer, the military

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[1] Cautwell AR Jr: AIDS and the Doctors of Death: an inquiry into the origin of the AIDS epidemic, Los Angeles: Aries Rising Press, 1988.

biowarfare unit was retitled the new Frederick cancer Research center. Litton Bionetics was named as the military's prime contractor for this project.[1]

A study supply of research animals (monkeys, chimpanzees, mice and cats) was necessary which resulted in the establishment of breeding colonies for SVCP. By 1971, a total of 2,274 primates head been inoculated at Bionetics Research laboratories under contract to Fort Detrick over 1000 of these monkeys had already died or had been transferred to other primate centers. By this time, experimenters had spread lymphoma producing viruses into several species of monkey, and had also isolated a monkey virus (Herpesvirus saimiri) that would have a close genetic relationship to a new Kaposi's sarcoma virus that produced the "gay cancer" of AIDS a few years later.[2]

Robert Gallo was a project officer of a primate study contracted by Bionetics that pumped cancerous human tissue as well as variety of chicken and monkey viruses into newborn macaques (a small species of monkey). Researchers at Bionetics evaluated the long-term cancer effects of injecting human and animal cancer material into various species of monkeys. New born monkeys, irradiated monkeys and monkeys primed with cancer causing chemicals, were injected with

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1 Cautwell AR Jr: AIDS and the Doctors of Death: an inquiry into the origin of the AIDS epidemic, Los Angeles: Aries Rising Press, 1988.

2 Cantwell Ar Jr: Kaposi's sarcoma and variably acid fast bacteria is vivo in two homosexual mencultis 32: P.-58-64,68 11983.

blood ("using multiple sites and volumes as large as possible") taken from various forms of human leukemia.[1]

(d) THE END OF THE SVCP AND THE BIRTH OF AIDS:

By 1977 the SVCP came to an inglorious end. According to Gallo, "Scientifically, the problem was that no one could supply clear evidence of any kind of tumor virus, not even a DNA virus and most researchers refused to concede that viruses played any role in human cancers. Politically the virus cancer programme was vulnerable because it attracted a great deal of money and attention.[2]

Despite all this, the SCVP was the birth place of genetic engineering molecular biology, and the human genome project more than any other program it built up the field of animal retrovirology, which led to the vital understanding of cancer and immunosuppressive retroviruses in humans.[3]

Few people understand clearly that AIDS is a new form of cancer, and this aspect of AIDS has not been publicized for obvious reasons. Physicians have always told their patients that cancer is not contagious or sexually transmitted. Virologists wanted AIDS and "gay cancer" to be a new disease because HIV was supposedly brand new. And so instead of looking for the source of HIV in the thousands of animal

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1 Cantwell Ar Jr: The cancer Microbe. Los Angeles: Aries Rinsed Press, 1990.

2 Cantwell Ar Jr: " Gay cancer Emerging viruses, and AIDS" New Dawn (Melbourne), sept 1998.

3 Larson CA: Ethric weapons, Military review, Nov. 1970, PP 3-11.

cancer experiments performed through out the world, the virologists instead on looking for the source of the virus in primates in the African rainforest.[1]

(e) THE PRE-AIDS GAY HEPATITIS B EXPERIMENTS (1978-1981)

As the SVCP was winding down. Thousands of gay men were signing us as guinea pigs for government-sponsored hepatitis B vaccine experiments in New York, Los Angeles, and San Francisco. In a few years these cities would become the epicenters for "gay-related immune deficiency syndrome" later known as AIDS.[2]

AIDS first erupted in gays living in New York city in 1979. The astounding and statistically significant fact is that 20% of the gay men who volunteered for the hepatitis B experiment in New York were discovered to be HIV-Positive is 1980 (A year before AIDS became "official" is 1981). Africa, the supposed birthplace of HIV/and AIDS.[3]

1.3 MEANING OF HIV/ AIDS

HIV Stands for Human immune deficiency virus. HIV is the virus that causes AIDS. While many viruses can be controlled by the immune

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1 Faden RR (chair): the Human Radiation Experiments: Final report of the President's Advisory committee, New York: Oxford university press, 1996.

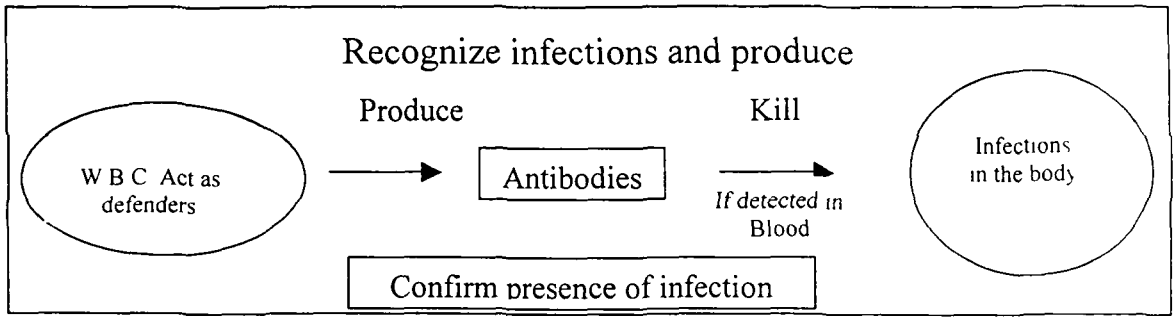
2 Gallor: Virus Hurteind: AIDS, Cancer and the Human retrovirus, New York: Basic Book 1991.

system, HIV targets and infects the same immune system cells that are supposed to protect us from illness.

These are a type of while blood cell called **CD4 cells** HIV takes over CD4 cells and turns them into virus factories that produce thousands of viral copies. As the virus grows it damages or kills CD4 cells weakening the immune system.[1]

AIDS stands for Acquired Immunodeficiency syndrome or Aquired jmmune deficiency syndrome (AIDS or Aids) and is a collection of symptoms and infections in humans resulting from the specific damage to the immune system caused by the human immunodeficiency virus. The late stage of condition leaves individuals prone to opportunistic infections and tumor.

Acquired Immuno Deficiency Syndrome is not single disease but a set of diseases. Hence it is named as a "syndrome" with a view to understand the reason for fatality of this syndrome, it is important to understand the immune system of a human body.

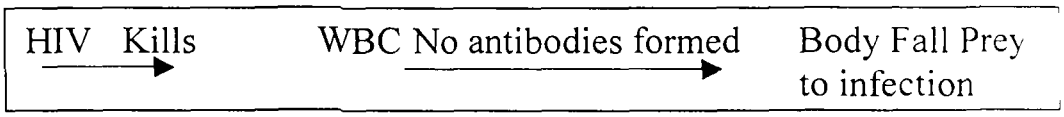


1.1 Immune System of the Body.

[1] The American foundation for AIDS research (2001) facts about HIV/AIDS Retrieved July 2003 from http://www.thebody.com/amfar/ounce/htm

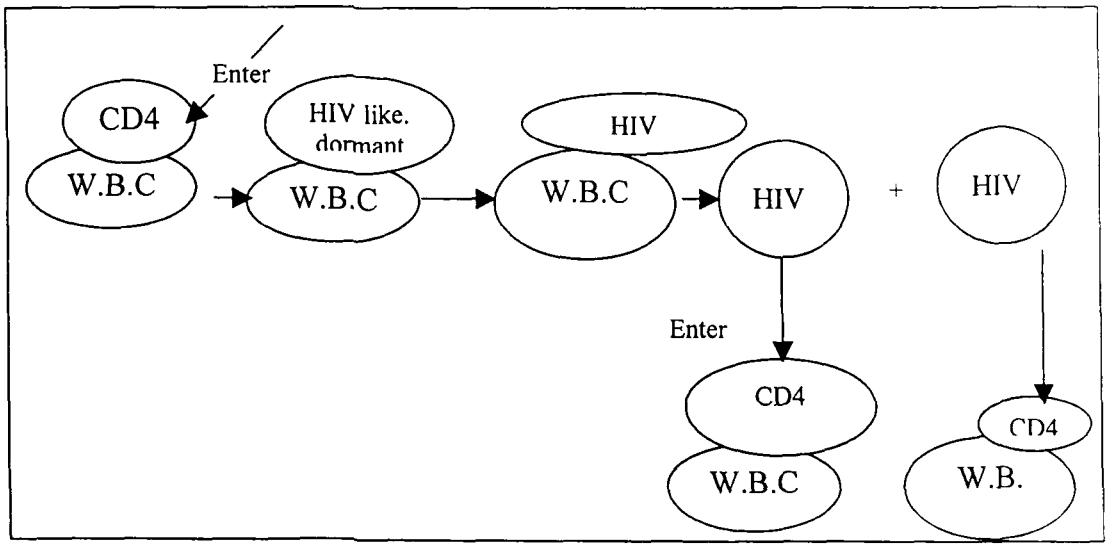
The functioning of the immune system in our body is shown in figure in a healthy individual infections are kept act bay by white blood cells (WBC) that act as defenders of our body. The WBC recognize foreign bodies (infections) and in response produce specific chemicals called antibodies which neutralise the invaders.

HIV is unique in its action as it targets the WBC that are vital in protecting our body from all the infections shown in figured 1.2



1.2 HIV Targets the Immune System (WBC)

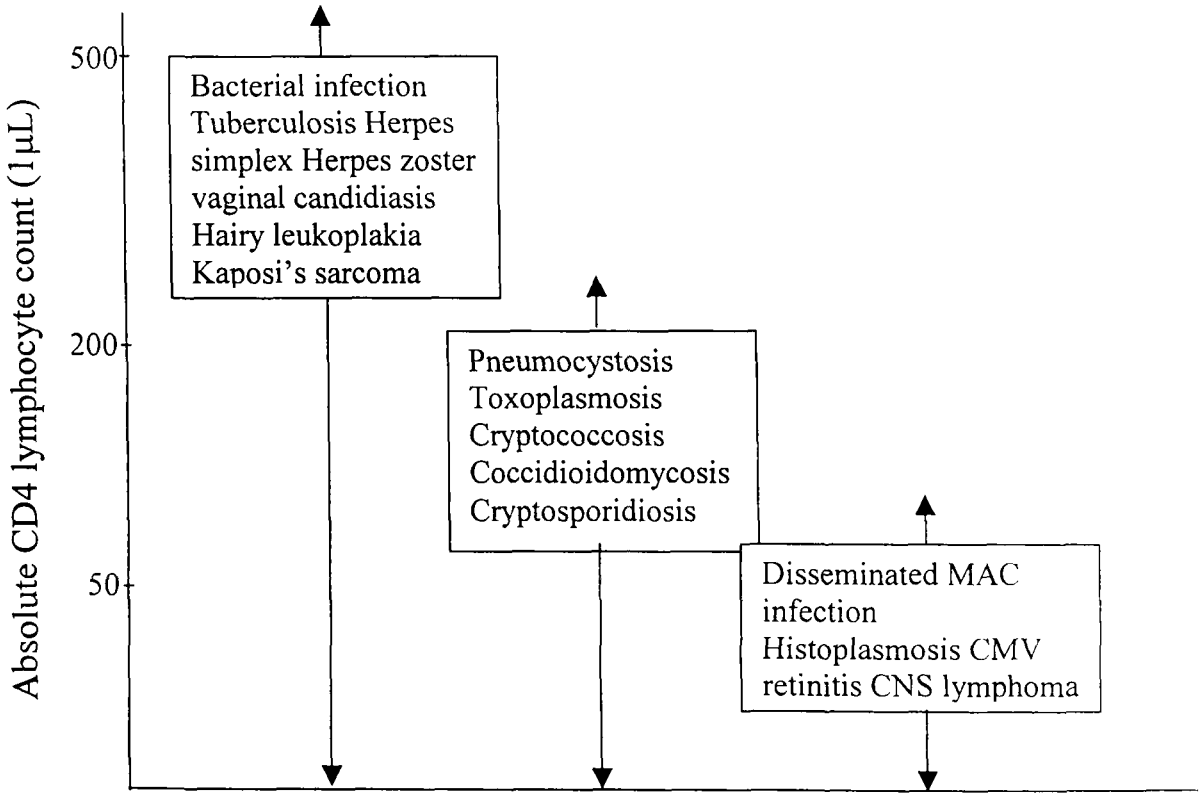
In other words, we can say that HIV directly attacks the protective cells (immune system) of our body. The crucial process which helps that HIV in escaping the attack of antibodies and fastly undetected replication in a human body is easily understand or shown in figure 1.3



1.3 Mechanism of HIV Replicability

White blood cells called lymphocytes have a CD4 molecule on their surfaces which helps them to communicate with each other. HIV enters into the CD4 molecule and inserts its own genetic material into the host CD4 cell. Once majority of the white blood cell has been destroyed the body starts falling prey to opportunistic infections.

HIV causes AIDS by attacking the immune system's soldiers – the CD4 cells, when the immune system loses too many CD4 cells, you are less able to fight off infection and can develop serious, often deadly, infections. These are called **opportunistic infections** (OIS) because they take advantage of the nobody's weakened defenses.[1]

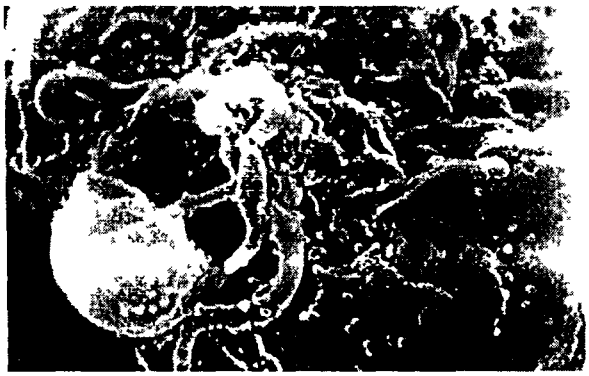


[1] The New Mexico AIDS info net (2001) Fact sheet 11: What is AIDS? Retrieved July 2003 from http://www.aidsinfont.org/arg/articles.php?articleID=104.

Relation ships of CD4 count to development of opportunistic infection (Source[1])

(a) INFECTION BY HIV

AIDS is the most severe manifestation of infection with HIV. It is a retrovirus that primarily infects vital components of the human immune system such as $CD4^+$ T cells (a subset of T cell), macrophages and dendritic cells. It directly and indirectly destroys $CD4^+$ T cells. $CD4^+$T cells are required for the proper functioning of the immune system. When it HIV kills $CD4^+$ T cells so that there are fewer than 200 $CD4^+$ T cell per micro litter (μl) of blood cellular immunity is lost, leading to the condition known as AIDS. Acute HIV infection progresses over time to clinical latent HIV infection and then to early symptomatic HIV infection and later to AIDS, which is identified on the basis of the amount of $CD4^+$ T cells in the blood and the presence of certain infections.



1.4 Structure of HIV

In the absence of antiretroviral therapy, the median time of progression from HIV infection to AIDS is nine to ten years and the median survival time after developing AIDS is only 9.2 months.[2]

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1 Larson CA: Ethnic weapons, Military review, Nov. 1970, PP 3-11

2 Morgan. D., Maha., Mayrrj as B., okongo, J.M., Lubega. R and whiteouts, J A (2002), "HIV-infection inreural Africa: is there is a difference in median time to AIDS and survival compared with that in industrialized countries AIDS 16(4): 597-632.PubMed (http //www .nebi.n/m .nih.gov/ entrez /query.fcgi.

HIV is genetically variable and exists as different strains, which cause different rates of clinical disease progression. The use of highly active antiretroviral therapy prolongs both the median time of progression to AIDS and the median survival time.[1]

(b) DIAGNOSIS

Since June 5, 1981, Many definitions have been developed for epidemiological surveillance such as the Bangui definition and 1994 expanded World Health Organization, AIDS case definition. In developing countries the World Health Organization staging system for HIV infection and disease using clinical and laboratory data, is used and in developed countries, the centers for Disease Control (CDC) classification system is used.

(c) DISEASE STAGING SYSTEM FOR HIV INFECTION AND DISEASE – WHO

In 1990, the World Health Organization (WHO) grouped these infections and conditions together by introducing a staging system for patients infected with HIV-1. Most of these conditions are opportunistic infections that are easily treatable in healthy people.

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[1] Tang J. and Kaslow, R.A. (2003), "The impact of host genetics on HIV infection nad disease progression in the era of highly active antiretroviral therapy." AIDS if (supply): 551-560 Pub Med.

- Stage I: HIV disease is asymptomatic and not categorizedas AIDS.

- Stage II: Includes minor mucocutaneous manifestations and recurrent upper respiratory tract infections

- Stage III: Includes unexplained chronic diarrhea for longer than a month, sever bacterial infections and pulmonary tuber culosis

- Stage IV: Includes toxoplasmosis of the brain candidiasis of the Esophagus, trachea, bronchi or lungs and Kaposi's sarcoma. these diseases are indicators of AIDS.[1]

(d) HIV -TEST

Many people are unaware that they are infected with HIV. Less than 1% of the sexually active urban population in India has been tested and this proportion is even lower in rural populations. Furthermore, only 0.5% of pregnant women attending urban health facilities are counseled, tested or receive their test result again, this proportion is even lower in rural health facilities. Therefore, donor blood and blood products used in medicine and medical research are screened for HIV. Typical HIV test, including the HIV enzyme immunoassay and the western blot assay,

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[1] World Health organization (1990) interim proposal for a WHO staging system for HIV infection and diseases " HOW WKIY epidemic Rec 65 (29(221-228 Pub Med

detect HIV anti-bodies in serum, plasma, oral fluid, dried blood spot or urine of patients. However, the window period (the time between initial infection and the development of detectable antibodies against the infection) can vary.[1]

The most common test for HIV is the antibody test called (ELISA). It can be done on blood saliva or urine. According to the CDC, it is more than 99% accurate. Results are generally available within two weeks. (There is a rapid ELISA test that gives result in less than half an hour.)

A positively results means your body has developed antibodies for HIV, so you are infected with the virus. To be completely certain, positive results are confirmed with a more sensitive test called the western blot.[2]

(e) SYMPTOMS OF HIV/AIDS

The symptoms of AIDS are primarily the result of conditions that do not normally develop in individuals with healthy immune systems. Most of these conditions are infections caused by

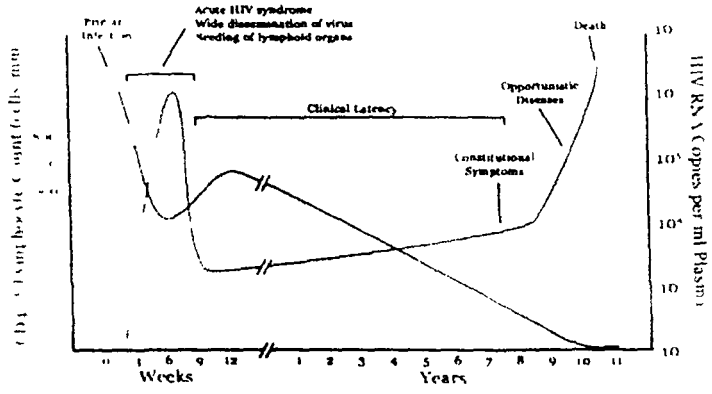

Fig. 1.5

1 CD (1992). 1993 Revised classify cation system for HIV infection and expanded surveillance case definition for AIDS among adolescents and adults (http://www.cdcgov/mmwr/preview/mmwrht ml/o1118871.htm.)

2 The American foundation for AIDS research. (2001) facts About HIV/AIDS· Retrieved July2003 from http://www.the body.com/amfar/ounce.html.

bacteria, viruses, fungi and parasites that are normally controlled by the elements of the immune system that HIV damages. Opportunistic infections are common in people with AIDS. HIV affects nearly every organ system. People with AIDS also have an increased risk of developing various cancers such as Kaposi sarcoma, cervical cancer and cancers of immune system known as lymphomas[1].

Many people do not develop any symptoms when they first become infected with HIV. Some people however illness within three to six weeks after exposure to the virus. This illness called acute HIV syndrome, may in headache, tiredness, nausea, diarrhea and enlarged lymph nodes organs of the immune system that can neck armpits and groin). These symptoms usually disappear within a week to a month and are often mistake viral infection.

During this period, the quantity of the virus in the body will be high and it spreads to different parts particular tissue. At this stage, the infected person is more likely to pass on the infection to others.

More persistent or severe symptoms may not surface for several years, even a decade or more, after HIV finding body in adults, or within two years in children born with the virus. This period of "asymptomatic" infection vary individual to individual. Some people may begin to have symptoms as soon as a few months while others may free for more than 10 years. How ever, during the "asymptomatic"

[1] From Wikipedia, the free encylopedia, p-4

period, the virus will be actively multiplying killing cells of the immune system.

(f) LATER SIGNS AND SYMPTOMS OF HIV/AIDS

The Center for Disease Control (CDC), gives the following signs and symptoms that may be warning signs of infection with HIV /AIDS. They are –

- Rapid weight loss
- Lack of energy
- Dry cough
- Recurring fever or profuse night sweats
- A thick, whitish coating of the tongue or mouth (thrush) that is caused by a yeast infection and some accompanied by a sore throat,
- Severe or recurring vaginal yeast infections.
- Chronic pelvic inflammatory disease or severe and frequent infections like herpes zoster
- Periods of extreme and unexplained fatigue that may be combined with headaches, light-headedness dizziness.
- Rapid loss of more than 10 pounds of weight that is not due to increased physical exercise or dieting

- Bruising more easily than normal
- Long-lasting bouts of diarrhea swelling or hardening of glands located in the throat, armpit, or groin.
- Increasing shortness of breath
- The appearance of discoloured or purplish growth on the skin or inside the mouth
- Unexplained bleeding from growths on the skin, from mucous membranes, or from any opening in to.
- Recurring or unusual skin rashes
- Severe numbness or pain in the hands or feet, the loss of muscle control and reflex, paralysis or loss strength
- An altered state of consciousness, personality change or mental deterioration
- Children may grow slowly or fall sick frequently. HIV positive persons are also found to be more vulnerable cancers.[1]

A HIV + person's symptoms depends as the mode of the HIV transmission and the lifestyle of the HIV positive person. Majority of persons who are infected through blood transfusion develop symptoms on an average from 3 years to 5 years with the other modes of

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[1] http://menshealth.about.com/old/conditions/a/HIV_sign.htm.

transmission when the quantum of the virus is low, the person can remained healthy for 8 to 12 years or longer. If an HIV positive person improves his/her quality of life by adopting safer sex methods, has good nutrition, regular exercise, regular medical management, emotional support does yoga and meditation, avoids stress and regularly treats other illnesses continues to be active and has an optimistic outlook she/he is likely to live longer.[1]

(g) MODE OF TRANSMISSION

The causative virus is transmitted from person-to-person, most frequently through sexual activity. It is (HIV) transmitted through unprotected penetrative sex (vaginal, anal, oral) with an infected partner, transfusion of infected blood and blood products contaminated neddles and syringes, and from an infected mother to her baby before. during delivery or through breast milk.

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[1] From Wikipedia, the free encylopedia, p-4

Estimated per act risk for acquisition of HIV by exposure route.

Exposure Route	Estimated infection per 10,000 exposures to an infected source.
Blood transfusion	9,000
Child birth	2,500
Needle sharing infection drug use	67
Receptive anal intercourse*	50
Percutaneous needle stick	30
Receptive penile-vaginal inter-course*	10
Insertive anal intercourse*	6.5
Insertive penile vaginal intercourse*	5
Receptive oral intercourse*	1δ
Insertive oral intercourse*	0.5δ
*Assuming no condom use δSource raters to oral interfuse performed are mean	

The basic modes of transmission are:

I. Sexual transmission

II. Direct Blood contact

III. Maternal –foetal transmission mother-to child transmission

Now here we discuses one by one:

(I) SEXUAL TRANSMISSION:

AIDS is first and foremost a sexually transmitted disease. Any vaginal, anal or oral sex can spread AIDS. AIDS is acquired mainly through heterosexual contact infected man to woman; infected woman to man). Every single act of unprotected intercourse with an HIV-infected person exposes the uninfected partner to the risk of infection.

Sexual transmission: Risks

- Peno-Anal > Peno-vaginal
- Peno-vaginal > Oral sex
- Male to Female > Female to Male
- More in presence of injuries
    - Hence risk more in coercive/violent sex[1,2].
    - More in presence of STIs

Anal intercourse carries a higher risk of transmission than vaginal intercourse because it is more likely to injure tissues of the receptive partner. For all forms of sex, the risk of transmission is greater where there are abrasions of the skin or mucous membrane. For vaginal sex the risk is greater when woman is menstruating.

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1 http://menshealth.about.com/old/conditions/a/HIV_sign.htm.

2 HIV/AIDS: The batics, by Dr. Atul abadkar, MD, National Durg Dependence treatment center All India Institute of medical sciences, New Delhi. .

Approximately 30% of women in ten countries representing "diverse cultural, geographical and urban / rural settings" report that their first sexual experience was forced or coerced, making sexual violence a key driver of the HIV/AIDS pandemic. Sexual assault greatly increases the risk of HIV transmission as protection is rarely employed and physical trauma to the vaginal cavily frequently occurs which facilitates the transmission of HIV.[1]

Exposed adolescent girl and woman above 45 years of age are more prone to get HIV infection. In teenagers the cervix is thought to be less efficient barrier to HIV than in mature genital tract of adult woman.

An STD in either the HIV-negative or the HIV positive partner facilitates the transmission of HIV. If an STD, such as syphilis chancroid or herpes cause ulceration in the genital or perineal region of the uninfected partner it becomes far easier for HIV to pass into his or her tissue. An STD causes inflammation, T-cell and monocytes/ macrophages, get concentrated in the genital area.

As for HIV infected people, they are more infectious to others in the very early stages, before antibody productions that during the

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1 To van abutra, S., Robisou, V., wongtrakul, J.., Senuum, S., Suriyanon, V., Kingkeow, D.Kawichai, S., Tanan, P., Duerr, A. And Nelson, K.E. (2002). "Maleviral load and heterosexual transmission of HIV-1 subtype E in nothers tailaved: J. a Cauir Immune defic syuder d2g (3): 275-283 Pibmed (http://www.ncbi.ulm.inhgov\entrez/query.&c&s.

"window period", and when the infection is well advanced, because level of virus in the blood at that time is higher that at other time.[1]

(II) DIRECT BLOOD CONTACT:

This transmission route is particularly relevant to intravenous drug users, hemophiliacs and recipients of blood transfusions and blood products. Sharing and reusing syringes contaminated with HIV-infected blood represents a major risk for infection with not only HIV, but also hepatitis B and hepatitis C. Needle Sharing is the cause of one third of all new HIV infections.

The WHO estimates that approximately 2.5% of all HIV infections in India are transmitted through unsafe healthcare injections. According to WHO, the overwhelming majority of the world's population does not have access to safe blood and "between 5% and 10% of HIV infections world wide are transmitted through the transfusion of infected blood and blood products[2]."

(III) MATERNAL FOETAL TRANSMISSION MOTHER-TO-CHILD TRANSMISSION

HIV may pass from an infected mother to her foetus through the placenta or to her infant during delivery or by breast-feeding about one third of the children or HIV-positive mother get infected though this

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1 Internet website:www.naco.nic.in/vsnaco/indiaseene/updestic.
2 PN Sahgal, health for the millions, August, 91.P-1,8,26.

route. The risk of infection transmission is higher if the mother is newly infected or if she has already developed AIDS. Infants and children progress rapidly to AIDS, they already account for about 20 percent cases to data.[1]

HIV TRANSMISSIONB BY MOTHERS TO BABY

- Before Birth: Baby shares mother's blood
- During birth
- Through breast-feeding though quantity of virus is small is breast milk, enough to cause infection in the baby.

A number of factors influence the risk of infection particularly the viral load of the mother at birth (the higher the load, the higher the risk). Breastfeeding increases the risk of transmission by 10-15%. This risk depends on clinical factors and may vary according to the pattern and duration of breast-feeding.

The risk of transmission from a pregnant mother to her baby is reported to be between 21-43% in developing countries. A prospective study involving 143 tribal pregnant women and their infants followed until 18 months of age reported an overall mother to child transmission efficiency of 48%. Almost 30-50% of the neonates acquire HIV infection during antenatal period and about 50-70% during delivery. The

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1 Coovadia.H.(2001) "antiretroviral agents-how best to protect infants from HIV and save their mothers from AIDS." N. Engl. I med 351(3): 289-292. Pub mol.

risk of acquiring HIV infection through breast milk is 14-29%, according to a study based an meta-analysis of other studies. The only observation study being conducted in Malavi has reported that the HIV incidence amongst infants who are breastfed between 1-5 months is higher (0.7%per month) when compared to that between 6-11 months (0.6% per months) and between 12-17 months (0.3% per months.[1]

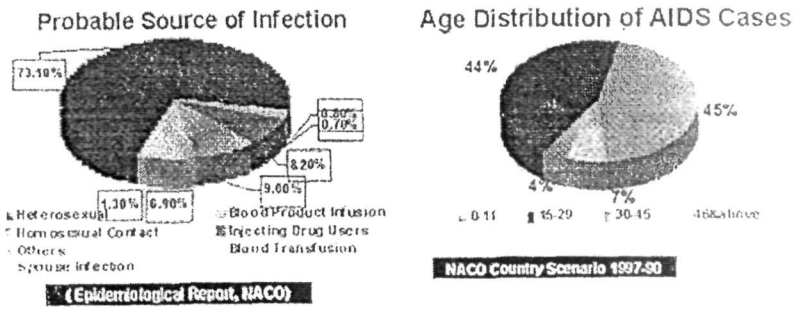

Fig. 1.6

But since the sexual route accounts for almost 80% of infections the prevalence is much higher in the sexually active age group of 15 years to 40 years. It is not who you are or where you are, but what you do that puts you at this risk of acquiring the HIV infection and eventually developing AIDS therefore, there are no risk groups' but only 'risk behaviours".

HIV/AIDS DOES NOT SPREAD BY

- Living with or sitting with HIV infected people.
- Hugging or touching an HIV infected people

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[1] Kumar RM, Uduman SA, Khurranna Ak, A P{rospective study of mother to-infant HIV transmission in tribal women from India. J A cquire Immune detic syndr Hum retroniral 1995; 19:238-248.

- Shaking hands or though social contact with an HIV infected person
- Sharing plates, thalis, glasses or cups, or by using the same utensils an HIV infected person.
- Travelling together by Bus, train or plane.
- Through insect bites mosquitoes, fleas, and bedbugs,
- Sharing toilets, towels, combs, soap or cloths.
- Kissing (between people, with no significant dental problem).[1]

Concluding Remarks

Thus. HIV Human Immunodeficiency Virus – is the virus that causes a AIDS Acquired Immune Deficiency Syndrome. HIV is transmitted from one person to another person through the exchange of body fluids such as blood semen and vaginal secretions. This is most often associated with sexual contact but can also be transmitted by exposure to infected blood through transfusions or sharing needles to inject drugs.

The virus infects certain cells of the body, particularly those with CD-4 protein on their surface CD-4, or T-helper cells, are an important part of the immune system. When a person is first infected a large amount of virus circulates within the body resulted in a decline in the number of CD-4 cells. At this point the body's immune system will regain control and suppress the virus for a period of about ten years. Thus, one can be infected with the HIV virus for years without having

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[1] HIV/AIDS: the Basics, by dr. Atul Ambedkar, MD. National Drug appendence treatment center ALL India Institute of medical science, New Delhi

AIDS. In other words having HIV infection does not means you have. Certain types of infections must be present for a person to be diagnosed as having AIDS.

There is no cure for the HIV virus even though medications are now available that diminish virus's ability to reproduce which in turn helps the immune system stay healthy and able to fight infection a little longer.

The only ways to eliminate the risks of HIV infection are through sexual abstinence and avoidance of illicit use of intravenous drugs.

CHAPTER – 2

Review of Literature

CHAPTER-II

REVIEW OF LITERATURE

With the increasing number of HIV infection and AIDS related deaths running into thousands each day. To get a comprehensive insight into the magnitude of the AIDS epidemic and various related aspects accelerating its fast spread, the available literature reviewing. It is presented in this section under the following heads:

1. AIDS, Awareness, Through Community Participation: Meenu Sharma (2006).

In this book, Meenu Sharma says about the epidemic of HIV/AIDS. The HIV has taken the form of an epidemic and is also one of the leading causes of life threatening diseases such as tuberculosis, cancer, dementia and eventually death amongst the most productive and reproductive sections of the population.

The present study was undertaken with a broad objective to create awareness about AIDS amongst most vulnerable sections of the society using community participation approach. The sample for the study comprised of the commercial sex-workers, the truck drivers and the rickshaw pullers. Community participation was ensured at various stages of the intervention such as development of the audio-visual aids training of few members of the sample communities as peer educators as well as conducting of HIV AIDS related out-reach activities within their respective communities by the peer-educators.

The study depicted findings of a wider significance in terms of recognition of not merely superficial but core factors enhancing samples vulnerability to HIV/AIDS.

Author's main focus is creating awareness through community participation in her book.

AIDS is undoubtedly the most devastating pandemic mankind has ever faced. As a cure remains elusive the disease continues to propel the evanescence of life. Today, the global community seems to be struggling as the disease rips apart the social and economic fabric of the society by killing people in prime of their youth, rendering millions of children, orphans and shattering homes and hopes alike with remote prospect for a cure or vaccine, the challenge to contain the spread of HIV has become imperative.

According to the author, although no culture or community is known to be immune to AIDS yet, certain populations are more vulnerable to the disease because of their high-risk behaviours. The book delves into the lives of some such communities with a modest attempt to cerate AIDS awareness amongst them. It focuses an documenting high-risk behaviour as well as in delineating factors fuelling them. A concerted effort has been made to understand various issues that can effect desirable behavioural changes in context to HIV/AIDS. The endeavour also envisages to demonstrate how community participation can be effectively used in raising HIV/AIDS awareness as well as in achieving sustainability of the programme.

2. AIDS and civil society.

India's learning curve, Radhika Ramashubban ed. and Bhanwar Rishyasringa ed. (2005):-

In this book, author offers for the first time an inside view of NGO-led HIV/AIDS Interventions on the ground. According to him the NGO-sector is the most visible face of civil society activism in India today, and NGOs, have to date offered the most creative and comprehensive responses to the complex challenges of the HIV/AIDS epidemic.

Authors mention that, the case studies in the book are candid in the way they discuss experiments and failures, frustrations and triumphs and, most importantly, learning curves in relation to both disease and society. For them, the stories bring alive some of the complex social and cultural issues surroundings HIV/AIDS in the country. In a fundamental sense, the introduction, overviews and case studies in the book bring to the fore some of the most unexamined, unquestioned and resilient aspects of Indian social and cultural organization that the 'social and moral order' and the way society perceives and responds to challenges to this order. Author's point of view in this book, that growth of an enlightened understanding about HIV/AIDS among the general public is an essential precursor for cogent public debate around the many faces of the epidemic and their linkages to larger in context of economic, political and social issues. For, it is only when HIV/AIDS moves out of the margins and the realm of 'the other', and becomes everybody's business and concern, that there will emerge a basis for the erosion of the terrible

discrimination against those affected by the disease, and for public pressure for more effective policies for its control.

Authors in this book focus on six NGO interventions that have been at the cutting edge of efforts to combat the epidemic since the earliest days of the 'virus appearance in the country. There are six NGOs sections in this book, corresponding to the six areas in which the NGOs work. Each NGO section begins with a short overview by the editors that lays out the principle issues pertaining to that particular area of the HIV/AIDS epidemic.

3. Answering your questions About AIDS; Seth C Kalichman, (1997):-

In this book according to the author, the personal and social tragedy of the AIDS crisis touches virtually everyone. For those who have not yet personally known someone stricken by this dreaded disease, many celebrities have brought AIDS into our lives. For instance-Actor Rock Hudson, basketball superstar Magic Johnson, actress and Comedian Sandie church, activist Elizabeth Glasor, film actor Anthony perkins and so on are among the 13 million people in the world who have been infected with HIV (Human immunodeficiency virus). According to the him from very beginning, education has been the first line of defense against AIDS.

This book represents a sorting through of the questions people phoned into AIDS hotlines. It is the first book that tries to answer the questions that you many actually have about AIDS, not the questions some one thinks you have. His (author's) approach is that there is no such thing as a question not

worth asking. This book answers America's questions with the scientific information currently available.

4. AIDS in Aisa; Jai P. Narain ed. (2004):-

This book, focused on Asia, is in recognition of the tremendous importance of HIV/AIDS as an unprecedented health and development threat in the region. It highlights the many advances in HIV research, as well as the new initiatives and their applications throughout the developing world, particularly in Asian context.

In this book editor describes the situation in Asia, programmatic issues and challenges, and the responses required , both in the area of the national AIDS control programmes and in research and development. The editor also talked about the social dimension and potential economic dimension about this epidemic.

In this book role played by injecting drug users in the AIDS epidemic and the close connection / correlation between STI and HIV are explained comprehensively by other contributors.

He also covers in the area of care and support and about antiretroviral therapy (ART). Editor's point of view that HIV/AIDS can not be tackled by the health sector alone, but it requires a broad multi-sectoral response.

The book focuses on a few critical areas that are of practical use to national AIDS control programmes, health care, workers, academicians and

NGOs active in the area of HIV/AIDS prevention and care. The book covers the most crucial aspects of the HIV/AIDS pandemic as it unfolds in Asia.

5. HIV/AIDS and Nursing secrets; Judy Shaw and Elizabeth Mahoney (2002):-

HIV/AIDS Nursing secrets is a comprehensive look at one of the leading health problems of our times. The question and answer format helps to clarify information that is necessary for anyone involved in health care setting. The book contains a review of statistics and trends both nationally and globally, as well as legal and ethical issues related to HIV/AIDS.

This book presents-in-depth discussions of topics such as diagnostic testing, the pathophysiology hepatitis C and adherence. The special needs of vulnerable populations are also examined in the book.

6. HIV/AIDS Internet Information Sources and Resources; Jeffrey T. Huber (1998):-

In this book author talked about, infection with human immunodeficiency virus (HIV) results in a complex, chronic disease process, complicated by myriad economic, legal, religious, psychological, social and spiritual factors. This chronic disease is chracterised by a varied cluster of signs and symptoms that typically progress to diagnosis of acquired immune deficiency syndrome (AIDS). HIV is differentiated from other chronic disease processes by the variety of cancers and opportunistic infections commonly

associated with AIDS as well as HIV-related demention and wasting on the wide variation in disease course progression and dying trajectory.

According to the author, information has been, and continues to be, viewed as a key resource in preventing infection with the human immunodeficiency virus, managing various medical complications associated with the disease, assisting with non-biomedical complexities, and ultimately extending life expectancy.

In this book author highlights the information being accessible through the internet and world-wide web, and HIV/AIDS-specific internet information sources and resource. The selection reflects the breadth and depth of information available as well as issues surrounding developing and maintaining a web presence, evaluating Internet sites and locating relevant, reliable HIV/AIDS information.

7. HIV/AIDS Education; R.C. Mishra (2005):-

In this book author focuses upon education in context of HIV/AIDS. According to him education can play a vital role for preventing HIV/AIDS. He explains the what type of relation should be between teacher and student. Teacher must have knowledge about HIV/AIDS and other STIs diseases and also deliver the lecture to students.

According to him health-education is the only means to enable people to make life-saving choices for this disease, for instance, avoiding indiscriminate sex, using condoms etc. Women suffering from AIDS or who are at high risk of

infection should avoid becoming pregnant since infection can be transmitted to the unborn or newborn. Education and guidelines for prevention should be made widely available.

He also talked about text book on HIV/AIDS in primary and secondary school level. Girls are more vulnerable for our social customs and cultural values. They can not talked about HIV/AIDS to anyone. So, through education or a particular topic on HIV/AIDS they can easily get knowledge about HIV/AIDS and other STIs.

8. Islamic Model For control of AIDS; Dr. Javed Jamil (1996):-

In this book, author's main focus upon the religion of Islam and Islamic technic for controlling or preventive this, dread disease

According to him, HIV/AIDS is not purely a medical problem it has social, economic and ethical dimensions as well as we all know that. He mentions specific and elaborate guidelines for sexual behaviour. And for this, it is the direct impact of these guidelines that AIDS has not affected the Muslim countries as severely as it has the other countries. And he also says that the incidence of AIDS is far lower in Muslim countries than in the western countries as well as among Muslims living in the west.

This book discusses the relevance of the Islamic model in a secular country like India.

9. Psychological perspective of HIV and AIDS, M. Rajamanickam ed, (2006):-

In this book, the editor makes a study of HIV/AIDS in context of psycho-social. He tracing the origin and spread of this deadliest disease across the world. He also critically analyses pre-and post-psyche of AIDS patients. With special emphasis on faulty sexual exercise-co-marital sex swinging, sexual sadism, sexual masochism, pedophilia and homosexuality.

According to him, human sexual activity is not new in its function. It was on going on right from the time when man was born in this world. There were sex diseases like the venereal disease, (VD); syphilis and Gonorrhea. Millions of men died of these diseases and man was able to conquer these diseases by discovering suitable medicines and methods of treatment. This disease, the HIV/AIDS cannot be said as absolutely new in origin. The editor in his book talked about a very useful purpose among all sections of the people in our country about HIV/AIDS.

In this book editors main objective is to highlight the psychological perspective of the victimized person.

10. Sexuality In The Time of AIDS, Contemporary perspectives From communities In India; Ravi K. Verma, Pertti J. Pelto, Stephen L. Schensul and Archana Joshi (eds.) (2004):-

The collection of essays in this book represents over 10 years of research efforts and intervention programmes, among an informal network of

non-governmental organisation (NGOs) and individual researchers in academic settings. Editors refer to the group as the 'sexuality behaviour research network' The network came into existence as a result of a programme of the Ford Foundation (India) that was originally designed to develop improved applied social science research in reproductive health, with a focus on women's health.

Editors in this book included 16 essays in this book organized around four major themes of sexuality. Premarital sexuality; marital and extramarital sexuality, sexual problems and prevention and lessons learned.

Four essays in this book in first section discuss premarital sexuality in four diverse contexts, and this section focuses on street children and male sex workers in Bangalore. Other some sections focuses on pornographic material as the major source of 'Sex-education' for young men. Other five section or five essays included in the marital and extramarital sexuality, and other highlight the policy implication.

11. Economic consequences of HIV/AIDS in India; pandav CS, Anand K, Shamanna BR, Chowdhury S, Nath LM :- (1997, Jan – Feb, 10) All India Institute of Medical Sciences, New Delhi.

This paper presents HIV/AIDS is one of the pressing public health problems in India. The impact of HIV/AIDS on the economic front is important as it affects mainly the young, who are in the reproductive age group.

According to this paper HIV/AIDS imposes a significant burden on the economic front. The productivity losses are likely to be an underestimate as the costs of treatment of HIV/AIDS patients, prevention programmes and labour costs have not been taken into account.

12. HIV/AIDS Epidemic In India; A critical Health And Development Issue Akram A. Khan and Nazli Bano:- (The Indian Economic Journal).

In this paper an attempt is being made to gauge the problem of AIDS in India and relationship with the food insecurity illustrated.

The paper represents that the first case of HIV were identified in 1986, and India set up a high-level National AIDS committee. According to this paper, there is a need to co-opt the existing primary health centres to deal with HIV/AIDS in coordination with other disease control programmes, and to involve the business community.

Development, dissemination and scaling up of labor-economizing methods of cultivation, food preparation water supply and livestock-rising should be encouraged. Agricultural education should be targeted to orphans and out of school youth and land tenure arrangements must safeguard the interests of widowed women and orphaned children.

This paper also covers the prevention nutritional care for people living with HIV/AIDS, about ARV treatment etc.

13. Socioeconomic aspects of human immunodeficiency virus (HIV) infection in developing countries; Gentilini M, Chieze F.

This article is the assessment of the socio-economical aspects of the human immunodeficiency virus (HIV) infection is difficult because of the relative scarcity information. This article studied by Gentilini M, and Chieze F. addresses mainly the socio-economic aspects of the AIDS pandemic in the inter-tropical zone of Africa, which, at the moment, constitutes the epicenter of the disease. The estimated economic weight of the AIDS attendance is 15 to 20 times more heavy for a developing country than for an industrialised one.

Above all discussion and after available literature's reviewing I move to my research study or research work. My research study is little bit different from all above. In my research study or in my dissertation work I cover the origin, history and rise of HIV/AIDS that how HIV/AIDS came, from where HIV/AIDS came and on what basis HIV turns from the stage of AIDS. IN my dissertation work I analyzed the problem of HIV/AIDS and covered the most highly affected states of India through HIV/AIDS, and also talked about which group is more risky for the HIV/AIDS and why, in preceding chapter.

METHODOLOGY

Secondary sources are the backbone of this study. Net surfing, magazines, journals, articles, books and review of literature are very useful for my study. On the basis of the secondary sources and the researches done on HIV/AIDS at the national and international level. The present study will explore and achieve the following objectives as:.

- To analyze the historical background of the disease of HIV/AIDS.
- To diagnose the problem and to know its causes.
- To analyze the causes of HIV/AIDS and to explore the causing virus of HIV/AIDS.
- To analyse the social and economic consequences of HIV/AIDS.
- To find out the magnitude of the problem and vulnerability of the women in the context of HIV/AIDS.
- To analyse the ways and means for the mobilisation process of the HIV/AIDS.
- To examine the effectiveness of the counselling process.
- To explore the new means to minimize these problems and designing of the awareness programmes (religious codes will be helpful).
- To emphasizing the preventing measures of HIV/AIDS as disclosed by these stories.

- To develop a set of communication material for AIDS awareness through community participation and IEC and through socially, psychologically and medically.
- To analyse the level of awareness and prevention taking by the people in society.

CHAPTER – 3

Understanding the Dynamics of HIV/AIDS in India

CHAPTER-III

3. Understanding the Dynamics of HIV/AIDS in India

Fig 3 1

3.1 General Information

Location:

South Asia, bordering the Arabian sea and the Bay of Bengal, slightly more than one third the size f the U.S. Neighboring countries are Bangladesh, Bhutan, Myanmar, China, Nepal and Pakistan.

Government, federal republic administrative divisions, 28 states and 7 union territories (UT)

Language:

English is an important language for national, political and commercial communication. Hindi (official national language). Regional languages,

Bengali, Telugu, Marathi, Tamil, Urdu, Gujrati, Malayalam, kannada, Oriya, Punjabi, Assamese, Kashmiri, Sindhi, and Sanskrit. There are many more languages and dialects.

Religions:

Hindu, Ismal, Christian, Sikh, other religions including Buddhist, Jain and Parsi.

Ethnic Groups :

Indo-Aryan, Dravidian, Mongoloid and others.

Executive :

Head of state- President Abul Kalam (since 26 July 2002) Vice President Bhairou Singh Shekhawat (since 12 August 2002)

Head of Government Prime Minister Manmohan Singh (since May 2004)

Cabinet:- Council of Ministers appointed by the President on the recommendation of the Prime Minister.

Special Factors

- ❖ India is marked by a vast (one billion) and ethinically heterogeneous population, with 13 officially recognised regional languages and many hundreds of ethnic and linguistic groups in the country.

- Liberalization of economic policies in the recent past has led to a significant influx of external investment (from the west as well as the East), which in turn has stimulated further developments in the industrial and infrastructure sectors of the country.
- Due to the lack of balanced economic development throughout the country, large internal population migrations – especially of young men in search of income are commonplace.
- Extensive cross-border trade with neighboring countries (especially Nepal, Bangladesh, Mayanmar, Sri Lanka and Pakistan) for commercial and other purposes is present reportedly there are some well established sex work traffic routes between Nepal and India and Bangladesh and India. Refugee populations from Tibet, Sri Lanka and Afghanistan can be found concentrated in certain areas of the country.
- Social sector development (especially health, Education and Social Welfare) fall under the jurisdiction of the respective states and union territories. As a consequence, the onus of taking action falls on state governments, rather than central government.
- Issues of human sexuality are extremely sensitive and attempts to broaden the discourse on human sexuality matters are considered by some as attempts to debase the local culture and traditions.

Socio-Economic Background:

With more than a billion people, one of the fastest economic growth rates in the world. Since the 1980s and robust information Technology industry that is projected to earn about US $ 50 billion by 2008. India is a country of striking contrasts.

With more than a quarter of the population living below poverty line, making the numbers in absolute terms, the country has the highest concentration of poverty anywhere in the world. The country accounts for 40 percent of the world's poor and its social indicators are still poor. At 6.0 percent of GDP (MArch 2004), it fiscal deficit is one of the highest in the world.

- More than half of all children under the age of four are malnourished and 30 percent of newborns are significantly underweight.
- India adds 16 million people every year to its population, just two million less than the entire population of Australia.
- 60 percent of the women are anaemic.
- Maternal deaths at 540/1000 account for almost 25 percent of the world's childbirth related deaths.
- Almost half of Indian women are illiterate though it has the second largest education system in the world after china.
- India has the largest remaining pool of polio transmission in world.

The general condition of India population has improved since the 1970s. Average life expectancy at birth has increased from 50 years to 63.9, the infant

mortality rate has fallen by half to about 67 percent, 1000 live birth and the crude birth rate has fallen to about 25 per thousand population.

India's national family welfare programme has helped move the country about two thirds of the way toward its goal of replacement level fertility. However population growth and the impending strain on the environment, natural resources, and social services still pose a threat to India's development.

Despite some improvement, India's women remain significantly more malnourished than men. Bias against women and girls is reflected in the demographic ratio of 933 females for every 1000 males. The country's maternal mortality rate at 540 is very high, particularly in rural areas it is even higher.

Although declining, largely preventable diseases such as leprosy, Tuberculosis, Cataract Blindness and Malaria to account for 50 percent of reported illness and around 470 deaths per 100,000.[1]

3.2 The History of HIV/AIDS in India

India is one of the largest and most populated countries in the world, with over one billion inhabitants of this number, at least five million are currently living with HIV. According to same estimates, India has a greater number of people living with HIV than any other nation in the world.[2]

HIV emerged later in India than it did in many other countries, infection rates soared throughout in 1990s, and have increased further in recent years.

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1 Manorama year Book, 2007, pp-503, 507.

2. UNAIDS, 2006 Report on the global AIDS epidemic

The crisis continues to deepen, as it becomes clearer that the epidemic is affecting all sectors of Indian society not just the groups- such as sex workers and truck drivers- that it was originally associated with.[1]

The spread of HIV within the country is as diverse as the societal patterns between its different regions, states and metropolitan areas In fact, India's epidemic is made up of a number of epidemic, and in some places they occur within the same state. The epidemic vary from states with mainly heterosexual transmission of HIV, to some states where injecting drug use is the main route of HIV transmission. Both tracking the epidemics and implementing effective programmes posses a serious challenge to the authorities and communities in India.[2]

At the beginning of 1986, despite over 20,000 reported cases worldwide, India had no reported cases of HIV or AIDS There was recognition, though that this would not be the case for long and concerns were raised about how India would cope once HIV and AIDS cases started to emerge one report published in a medical journal in January 1986, stated.

"Unlike developed countries, India lacks the scientific laboratories, research facilities, equipment and medical personnel to deal with an AIDS epidemic. In addition, factors such as cultural taboos against discussion of sexual practices, poor coordination between local health authorities and their communities, widespread poverty and malnutrition and a lack of capacity to

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1 The Lancet (2003) 'Spreading the word about HIV/AIDS in India,' Vol 361, May 3,
2 UNPAN (2003) National AIDS Prevention and control Policy (India) www unpan org

test and store blood would severely hinder the ability of government to control AIDS if the disease become widespread.[1]

Later in the year, India's first cases of HIV were diagnosed among sex workers in chennai, Tamil Nadu. It was noted that contact with foreign visitors had played a role in initial infections among sex workers and as HIV screening centres were set up across the country there were calls for visitors to be screened for HIV. Generally these calls subsided as more attention was paid to ensuring that HIV screening was carried out in blood banks.[2]

In 1987 a National AIDS control Programme (NACP) was launched to co-ordinate national responses. Its activities covered surveillance, blood screening and health education. By the end of 1987, out of 52, 907 who had been tested, around 135 people were found to be HIV positive and 14 had AIDS. Most of these initial cases had occurred through heterosexual sex, but at the end of the 1980s a rapid spread of HIV was observed among injecting drug users in Manipur, Mizoram and Nagaland, three north Eastern states of India bordering Myanmar (Burma).[3,4]

AT the beginning of the 1990s, as infection rates continued to rise responses were strengthened. In 1992 the government set up NACO (the National AIDS control organization), to oversee the formulation of policies, prevention work and control programmes relating to HIV and AIDS. In the

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1. UNPAN (2003) National AIDS Prevention and control Policy (India) www.unpan.org.
2. Kakar D.N and Kakar S. N. (2001), Combating AIDS in the 21st Century Issues limited, p-31
3. NACO (2006), UNGASS India report: Progress report on the declaration of commitment on HIV/AIDS
4. Pands S. (2002), "The HIV/AIDS Epidemic in India', Abdul-a under A.S. (Eds.) "The epidemic and the response in India". p-20

same year, the government launched a strategic plan for HIV prevention. This plan established the administrative and technical basis for programme management and also set up state AIDS bodies in 28 states and 7 union terrtories. It was able to make a number of important improvement in HIV prevention such as improving blood safety.[1]

By this stage, cases of HIV infection had been reported in every state of the country. Throughout the 1990s, it was clear that although individual states and cities had separate epidemics, HIV had spread to the general population. Increasingly, cases of infection were observed among people that had previously been seen as 'low-risk' such as housewives and richer members of society.

In 2001, the government adopted the National AIDS prevention and control policy. During that year, Prime Minister Atal Bihar Vajpayee addressed parliament and referred to HIV/AIDS as one of the most serious health challenges facing the country. The Prime Minister also met the Chief Ministers of the Six high-prevalence states to plan the implementation of strategies for HIV/AIDS prevention.[2]

HIV had now spread extensively throughput the country. A 2004 NACO report revealed that the total number of people living with HIV had risen from 0.2 million in 1990 to 3.86 million in 2000. BY 2003, 5.1 million infections had been reported.[3]

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1 Bhupesh M, (1992) 'India Disquiet About AIDS control' the Lancet Vol. 240, No. 8834/8835

2 Atal Bihari Vajpayee, Speech at the meeting with chief Ministers of High Prevalence states on the issue pf control and prevention of HIV/AIDS, New Delhi, May 22, 2001

3 NACO, Annual report (2002-04).

There is disagreement over how many people are currently living with HIV in India. UNAIDS (the united National agency) HIV estimates that there were 5.7 million people in India living with HIV by the end of 2005 and suggesting that India has a higher number of people living with HIV than any other country in the world.[1]

By the end of July 2005, the total number of AIDS cases reported to NACO was 111, 608 of this number 32, 567 were women and 37% were under the age of 30. These figures are not completely accurate reflection of the actual situation though, as large number of AIDS cases go unreported.[2]

Overall around 0.9% of India's population is living with HIV while this may seem a low rate. India's population is vast, so the actual number of people living with HIV is remarkably high. There are so many people living in India that a were 0.1% increase in the HIV prevalence would increase the estimated number of people living with HIV by over half a million.[3]

A number showed that infection rates among young girls aged 13 to 24 were between five and eight times higher than those among boys of the same age. The prevalence levels among young women are three to four times higher than among young men.

In lower prevalence situations, young men usually have higher infection rates than young women, as the pandemic progresses an increasing number of women are infected. Females have higher infections rates at an earlier age than

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1 UNAID, 2006 Report on the global AIDS epidemic.
2 NACO (July 2005), Monthly updates on AIDS.
3 UNAIDS, 2006 Report on the global AIDS epidemic.

male for a combination of both socioeconomic (that gender discrimination in schooling, jobs access and wage rates, greater difficulty in accessing preventing and curative health care) and biological reasons (that susceptibility to vaginal infections and abrasions, particularly at young ages).

Despite recent positive trends among young people (especially females in some India countries, overall about twice as many young women as men are infected in India. In 2005, an estimated 6-11 percent of young women aged 15-24 were living with HIV/AIDS, compared to 3-6 percent of young men. This appears to be due to a combination of factors.

Women and girls are commonly discriminated against in terms of access to education, employment, credit, health care, land and inheritance. with the downward trend of Indian economies increasing the number of people in poverty, relationship with men (casual or formalized through marriage) can serve as vital opportunities for financial and social security, or for satisfying material aspirations. Generally older men are more likely to be able to offer such security. But, in areas where HIV/AIDS is widespread they are also more likely to have become infected with HIV. The combination of dependence and subordination can make it very difficult for girls and women to demand safer sex (even form their husbands) or to end relationships that carry the threat of infection.

Studies have shown that young women tend to marry men several years older and that their risk of infection increases if a husband is three or more years older than they are. Meanwhile ignorance about sexual and reproductive

health and HIV/AIDS is widespread. In India up to 85 percent of women aged 15-24 have been shown to lack sufficient knowledge about HIV/AIDS. This combined with the fact that young women and girls are more biologically prone to infection (the cervix being susceptible to lesions) helps explain the large differences in HIV prevalence between girls and boys aged 15-19.[1]

3.3 Driving Factors of HIV/AIDS Epidemic in India

The rest of this we will discuss some of the core drivers or driving factors of India's HIV/AIDS epidemic under the following five broad headings: Biological, Socio-Cultural, Socio-economic, Socio-political/ historical and psychological. A word of caution however, must be entered once again here because the evidence is quite mixed with respect to the extent to which each of these groups of factors contribute to the spread and entrenchment of the pandemic across the India.

Biological Factors:

On the biological front, research points to three key factors as the proximate determinants of India's high HIV infectivity. The first of these is the existence of undiagnosed and untreated sexually transmitted diseases among many Indians. Studies suggest that every 10 person, one person is infected with HIV. India has the second highest incidence of curable STDs at 160 cases per 1,000 people aged 15-49 years.

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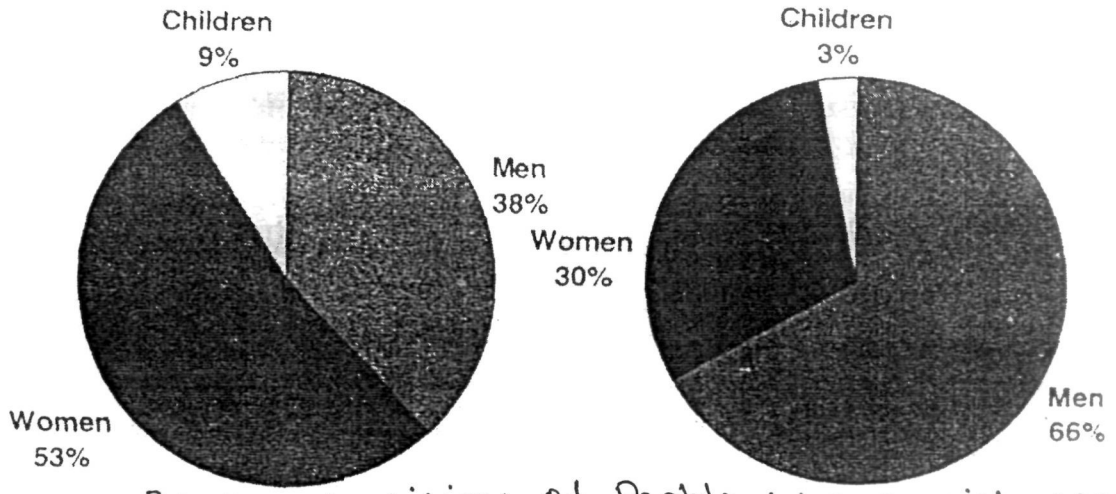
[1] Poku K. Nana, 2005, 'AIDS in Africa – The poor are dying', Polity Press p-66.

One biological factor that has emerged in the recent literature as having some influence on the spread and transmission of HIV is the low rate of male circumcision found in India. There are a much higher proportion of both males and females who are circumcised in India.[1]

The second biological factor to be considered here pertains to the physiological vulnerability of women. Research shows that the risk of becoming infected with HIV during unprotected vaginal intercourse is as much as two to four times higher for women of all ages than for men. Women are also much more vulnerable to other STDs. In India, there are currently six women with HIV for every five men and move than four fifths of the global total of HIV infected women are Indian (see Figure 3.2).



3.2-Composition of People Living with HIV/AI?

Source - Data from UNAIDS

In comparison to men women are biologically more vulnerable to HIV infection due to the fact that they have a bigger surface area of mucosal exposed to their partner's sexual secretions during sexual intercourse. The risk

[1] Poku, K. Nana; 2005, 'AIDS in Africa – The Poor are dying', Polity Press. pp. 70-73

of acquiring HIV for females is reported to be higher by 2 to 17 times by different studies. All of this make the male to female transmission much more efficient than the female to male transmission.[1]

Socio-Cultural Factors:

Alongside the biological factors there are a number of socio-cultural behavioral factors which either are regarded as having or have been demonstrated to have a major impact on the transmission of HIV/AIDS in India. These factors derived from traditions and practices.

HIV is a behavioural epidemic that is driven by individual behaviours. Individual behaviours are in turn largely influenced by social, cultural and religious factors that leave people with little or no control over their exposure to HIV. According to Betancourt, Lopez and cole (cited in Bee, 1995) culture in essence "describes some system of meanings and customs including values attitudes, goals laws, beliefs morals as well as physical artifacts of various kinds tools, and forms of dwellings. Further more to be called a culture this system of meanings and customs must be shared by some identifiable group and transmitted from one generation of that group to the next."[2]

Extensive studies have been carried out which, show that meaningful strategies to reduce HIV related risk behaviour can not be realized without understanding the dynamics of family history, cultural norms, feelings of self

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1 AN International Social work conference. (December 7th –9th 2004), community care and support foe Persons Living with HIV/AIDS; challenges for the New Millennium, P-12

2 Sharma, Meenu; 'AIDS Awareness Through community Participation', 2006, Kalpaz Publications, p-45.

power and self sufficiency as well as gender role expectations. The need to determine the salient factors in socio-economic structure and culture which contribute to the spread of AIDS.

Talking about sex and sexuality is still a taboo in many parts of the India. Cultural norms, societal practices and family values by and large dictate sex to be a private and prohibited issue, which is not to be discussed openly in public. In India, relevant data assessing knowledge, attitudes and beliefs regarding HIV/AIDS among School/ College going adolescents indicate a lack of AIDS awareness. A study conducted among secondary school students in rural areas surrounding Delhi showed that although 25 percent of them were sexually active and majority of them were not aware about sex and sexuality.

Violence against women also play a key factors in spreading the HIV/AIDS and other STDs and STIS. Women subjected to violence at the hands of their husband or partners are at a greater risk of acquiring HIV. The UNAIDS (1999) report shows, "Even when the violence is not sexual, however, the mere threat of it makes women wary of challenging their partner's extramarital relations or afraid to demand condom use." One out of every three women worldwide has been abused, beaten or coerced into sex according to the recent global data (NACO, April, 2000). Forced sex is known to transmit HIV more readily because of the greater probability of genital injury and because of no condom use in such situations.

Adverse societal norms and practices also challenge women's ability to protect themselves from HIV. For Instance, certain communities in India like

the Bedias and Bancharas have a history of practicing community based prostitution. In some south Indian states religious based prostitution (Devdasi systems) and exploitation of girls is routine and part of the ritual of "growing up." Such practices coupled with a lack of negotiating power make young girls more vulnerable to HIV/AIDS.

Globally there are existing an imbalance of power between men and women based on gender lines. In many societies across the globe differentiation based on gender is fundamental. The virginity myth is a necessary condition for women to marry, where as no such prerequisite exists for man.[1]

Socio-Economic Factors:

The struggle to survive everyday overshadows attention and concern about a virus that does not demonstrate any immediate harm poverty. Migration and prostitution, while are often a result of economic compulsions are making people more vulnerable to HIV. Mobile workers are defined as those workers who work for away from their permanent places of residence and are usually unable to return home at the end of the working day. Therefore, they have temporary residence in the vicinity of their work sites and return home at various intervals for example such workers including truck driver, road/ dame/ building construction workers, commercial sex workers, injecting drug users, wildlife officers etc.

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[1] Ibid; pp-47-48

Poverty manifest itself in the form of sexual abuse, sexual exploitation and prostitution. Economic pressures are forcing and ever-increasing number of people into flesh trade.[1]

Socio-Political and Historical Factors:

Political turmoil and civil war in many countries have also been instrumental in the rapid spread of the HIV. For many of them sex is a source of comfort and not of any special danger. Epidemiological estimates by the India army indicated that there were at least six thousand armed forces personnel who were HIV positive by the end of the year 1998. According to a report since these personnel are subjected to immense physical as well as mental stress and they have to stay separated from their families under inhospitable conditions for long periods, the desire to seek sexual satisfaction often leads them to sex workers.

Psychosocial Factors:

The word psycho is derived from the Greek word, "Psyche", which relates to the mind, spirit and soul. So we can say, psychosocial factors refer to those social issues, which have a lasting impact on an individual's mind. Many a times societal oppression in the form of neglect, abuse and exploitation especially during childhood, leaves a deep impact on the psychology of an individual people who have been abused and exploited at the hands of society

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1 Poku; K. Nana; 2005, 'AIDS in Africa – The Poor are dying,' Polity Press, P-75-76

are more vulnerable to HIV/ AIDS. Their abuse has been known to lead them to a feeling of loss of self-esteem and control over their lives. They are also known to become more prone to drug taking and commercial sex.

In the Indian context. Mane and Maitra, observed that there is a tendency to be psychologically oriented towards morality rather than towards real life issues related to sex. Women are brought up to be psychologically passive in talking about sex, sexuality and condom use with their partners. Female sexuality to them means being sexually subordinating to men and fulfilling roles of reproduction as well as motherhood.[1]

3.4 The Groups Most Affected by HIV/AIDS in India

HIV and AIDS affect all segments of India's population, from children to adults, businessmen to homeless people, female sex workers to housewives and gay men to heterosexuals. There is no single 'group' affected by HIV.

In contrast to the common perception of HIV as something that only affected injecting drug users and gay men, the overwhelming majority of infections in India occur through heterosexual sex. In large numbers of cases, women in monogamous relationships are becoming infected because their husbands have had multiple sexual partners. Women currently account for 39% of HIV infections in India and it is thought that this figure is continually rising.

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1 An International Social work conference (December 7th-9th, 2004). Community care and Support for Persons living with HIV/AIDS,' challenges for the New Millenium, P-30.

The people living with HIV in India are incredibly diverse and many would not be considered to be members of 'high risk-groups'. It is possible to identify certain populations that face a proportionately greater risk than others. These risk groups include sex workers, infecting drug-users, truck-drivers, migrant workers and Men who have sex with men (MSM).[1]

Sex-workers:

Sex work is very widespread in India, and occurs on a much larger scale than in many other countries women often get involved through poverty. marital break-up, or because they are forced into it. Sex work is not strictly illegal in India, the government has plans to introduce stricter legislation in regard to sex work for opposed by organized sex worker groups who that such legislation would just push the trade underground and make it harder to regulate. It would also make it more difficult to reach sex-workers with information about HIV, at a time when misinformation about AIDS among this group is rife, for instance, one national study suggest that 42% of sex workers believe that they can tell whether a client has HIV on the basis of their physical appearance.

Mumbai has the country's largest brothel based sex industry with over 15,000 sex workers is estimated that in the region of 70% of the sex workers in Mumbai are HIV positive 26% of sex workers in Mysore are living with HIV.[2]

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1 UNDP (2005), The Socio-Economic Impact of HIV and AIDS in India.

2 Bbc. Co. UK News (December 2005), 'India Sex workers stage protest.'

Injecting (I DUs) Drug-Users:

Nationally HIV prevalence among injecting drug users appears to have declined slightly in recent years, from 13% in 2003 to 10% in 2005. Transmission through injecting drug use is still a major driving factor in the spread of HIV in India. This is particularly the case in the North-Eastern states of India, such as Manipur, where the HIV prevalence among injecting drug users has been consistently high in recent years. Injecting drug use is also a major problem in urban areas outside the North, such as Mumbai, Kolkata and Chennai.

The alarming levels of infection occurring through needle sharing have implications that extend beyond networks of drug users. Some of those who inject drugs are also sex workers or truck-drivers and many are sexually active. which cane result in infection being passed on to their partners.[1]

Truck Drivers:

India has one of the largest road networks in the world and an estimated 2 to 5 million long distance truck drivers and helpers. The extended periods of time that they spend away from their families place them in close proximity to "high-risk" sexual network and often results in them having an increased number of sexual contacts.

During their journey's the drivers often stop at 'Dhabas', roadside hotels that usually provide food, rest, sex workers, alcohol and drugs. They pick-up

[1] NACO (April 2006), HIV/AIDS Epidemiological Surveillance and Estimation report for the year 2005.

the women, use them and leave them at some other 'Dhaba', where they are used by other drivers and local youths. As a result, truck drivers are crucial in spreading STDs and HIV infection throughout the country.

There is no entertainment. It is day-in-day out driving when they stop they drink, dine and have sex with women. Then they transfer HIV from urban to rural settings".[1]

Men who have sex with Men:

Sex between men is highly stigmatized in India and is not openly talked about to make easy for people to underestimate how commonly it occurs. Studies have shown that sexual activity between men is relatively common in both urban and rural areas of India.

Data concerning men who have sex with men (MSMS) is extremely scarce in the Indian context. This lack of information is particularly troubling in relation to the HIV/AIDS epidemic and the fact is that MSM sexual activities are known to carry a high risk of HIV infection. MSM is intended to be a strictly behavioral term and does not suggest any specific sexual identity or orientation. Using the term MSM in place of 'gay men' is especially useful in India since, of those engaging in sex with the same gender.

A 1990 report sponsored by the world Health organization Global Programme on AIDS entitled 'Literature Review on Bisexuality and HIV Transmission, found a 'frustrating absence' of socio-behavioural research and

[1] Christensen A. (2002) "Truckers carry dangerous cargo', Global Health Council, May, 1.

mentioned that, "in mast societies, the social cultural pressures towards adopting heterosexual lifestyles, including marriage and childbearing results in significant underestimation of same sex contacts." A few studies, mainly in urban population have reported frequencies of MSM behaviours. In these studies the percentage of men reporting MSM experience ranged from 1.5 percent to 10 percent in various locations and populations. A survey in western Maharashtra reported figures of around 1.5 to 3.1 percent in different sectors of the populations.[1]

Migrant Workers:

Large numbers of Indians have moved around within India, to neighbouring countries or overseas in the search of work. In some parts of India, three out of four households include a migrant. It is the situations encountered and the behaviours possibly engaged in during mobility or migration that increase vulnerability and risk regarding HIV/AIDS. In many cases, migration does not change an individual's sexual behaviour, but leads them to take their established sexual behaviour to areas where there is a higher prevalence of HIV. An individual will become involved in casual sexual relationships, which in turn may increase the risk of HIV transmission.[2]

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1 Verma, Ravi K., Pelto, Pertti J., Schensul, Steplen L., and Joshi, Archana, 2004. 'Sexuality in the Time of AIDS, contemporary perspectives from communities in India,. pp-195-196.

2 UNAIDS (2001) "Population Mobility and AIDS', Technical update, February, p. 5.

3.5 HIV/AIDS Statistics in India

India has a population of one billion, around half of whom are adults in the sexually active age group. The first AIDS case in India was detected in 1986 and since then HIV infection has been reported in all states and union Territories.

The spread of HIV in India has been diverse, with much of India having a low rate of infection and the epidemic being most extreme in the southern half of the country and in the far North-East. The highest prevalence rates are found in Maharashtra in the west, Andhra Pradesh and Karnataka in the south and Manipur and Nagaland in the North –East.

As of July 2005, 92% of all nationally reported AIDS cases have been found in 10 of the 38 states union territories. The greatest number were in Maharashtra and Gujarat in the West, Tamil Nadu and Andhra Pradesh in the South and Manipur and West Bengal in the North-East.

In the Southern states, the infections are mostly due to homosexual contact. While infections are mainly found amongst injecting drug users in Manipur and Nagaland. (Seen data 3.1).

Estimated No. of People living with HIV/AIDS, End of 2005.

Group	Living with HIV/AIDS
Adults, Children	5,700,000
Adults	5, 600, 000
Women	1, 600, 000
Adult HIV prevalence estimate	0.9%

[Source-UNAIDS/WHO estimates]

Adults are defined as people aged 15 or above. These estimates include all these with HIV infection, whether or not they have developed symptoms of AIDS.

The Indian National AIDS control organization (NACO) estimates that 5.21 million people were living with HIV in 2005, giving an adult prevalence of 0.91%. This represents a slight increase from the 2004 estimate and a substitution increase from 4.58 million in 2002.

AIDS Data end of July 2005

Gender	**Cumulative AIDS Cases**
Male	79, 041
Female	32,567
Total	111, 608

The statistics for AIDS cases may be a poor guide to the severity of the epidemic, as in many situations a patient will die without HIV having been diagnosed and with the cause of death attributed to an opportunistic infection, such as tuberculosis.

According to UNAIDS/WHO, between 270, 000 and 680,000 Indians died of AIDS in 2005. This data shows that how many cases through which route reported (3.2).

Transmission categories	Number of Cases	%
Sexual	95,941	86%
Prenatal	4,059	4%
Blood and Blood Products	2,231	2%
Injecting drug users	2, 672	2 %
others (not specified)	6, 705	6%
Total	111,608	100%

Now we see a data in which different age groups male and female were reported, (3.3)

Age Group	Male	Female	Total
0-14	2,860	1,994	4,854
15-29	21782	14,405	36.187
30-49	48,342	14,508	62,850
≥50	6,057	1,660	7,717
Total	79,041	32,567	111.608

Data (3.4) Shows HIV estimates in 2005 in different state/ Union Territory. The Prevalence rates below are taken from data collected during screening of women attending antenatal clinics.

State/ Union Territory	HIV Prevalence (%)
A and N Islands	0.58
Andhra Pradesh	2.00

Arunachal Pradesh	0.43
Assam	0.00
Bihar	0.00
Chandigarh	0.00
Chattisgarh	0.25
D and N Haveli	0.30
Daman & Diu	0.13
Delhi	0.25
Goa	0.00
Gujarat	0.25
Haryana	0.13
HImachal Pardesh	0.13
Jammu & Kashmir	0.00
Jharkhand	0.13
Karnataka	1.25
Kerala	0.25
Lakshdweep	0.00
Madhya Pradesh	0.25
Maharashtra	1.25
Manipur	1.25
Meghalaya	0.00
Mizoram	0.88

Nagaland	1.63
Orissa	0.25
Pondicherry	0.25
Punjab	0.13
Rajasthan	0.13
Sikkim	0.30
Tamil Nadu	0.50
Tripura	0.00
Uttar Pradesh	0.00
Uttranchal	0.00
West Bengal	0.84

Some areas report on HIV prevalence rate of 0 in antenatal clinics. This does not necessary mean that there is no, HIV case or HIV positive in the area, as some of them report the presence of the virus at STD clinics and amongst injecting drug users. In many states and territories, the average antenatal HIV prevalence is based on reports from fewer than five clinics.

The average HIV prevalence among women attending antenatal clinics in India is 0.88%. Much higher rates are found among people attending sexually transmitted disease clinics (5.66%), female sex workers (8.44%), injecting drug users (10.16%) and men who have sex with men, MSM (8.74%).

Rates vary widely between regions and exceed 20% among female sex workers in Maharashtra, injecting drug users in Delhi and Manipur and men who have sex with men in Delhi.[1,2,3]

Monitoring the HIV/AIDS epidemic is also undertaken through the reporting of AIDS cases. By the end of July, 2005, 111,608 AIDS cases were reported to NACO.

3.6 The HIV/AIDS situation in Different states in India

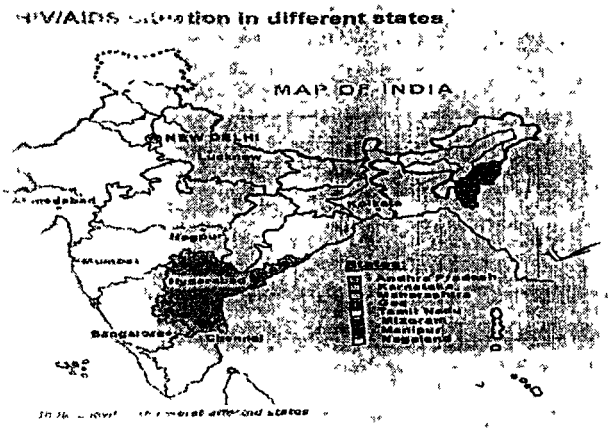

Fig. 3.3

The vast size of India makes it difficult to examine the effects of HIV on the country as a whole. The majority of states within India have a higher population than most African countries.

The HIV prevalence data for each state is established through clinics, where pregnant women are tested. While this means that the data are only

1 HIV/AIDS epidemiological surveillance and estimation report for the year 2005, NACO, April 2006.
2 Monthly updates on AIDS, NACO, 31 July, 2005
3 UNAIDS/WHO 2006 report on the global AIDS epidemic.

directly relevant to sexually active women, they still provide a reasonable indication as to the overall HIV prevalence of each area.

The following states have recorded the highest levels of HIV prevalence at antenatal and sexually transmitted disease (STD) clinics over recent years.

Andhara Pradesh:

Andhra Pardesh is a Hindu state in the southeast of the country with a total population of around 76 million, of whom 6 million live in or around the city of Hyderabad. The HIV prevalence at antenatal clinics was around 2% in both 2004 and 2005, higher than in any other states. The vast majority of infections in Andhra Pradesh are through sexual transmission. HIV prevalence at STD clinics was 22.8% in 2005.

Goa:

Goa is a very small state in the southwest of India and it is best known as a tourist destination. The number of tourist almost equals the resident population, which is about 1.3 million. STD prevalence clinics was 14% in 2005 and its indicating that Goa has a serious epidemic of HIV among sexually active people.

Karnataka:

Karnanataka is a divers state in the south west of India and has a population of around 53 million. In karnataka the average HIV prevalence at antenatal clinics has exceeded 1% in all recent years. Districts with the highest

prevalence tend to be located is and around Banglore in the southern part of the state and in northern karnataka's "devadasi belt". Devadasi women are a group of women who have historically been dedicated to the service of gods. These days, this has evolved into sanctioned prostitution and its result in the form of many women from this part of the country are supplied to the sex-trade in big cities such as Mumbai. The average HIV prevalence among female sex workers in karnataka was 18% in 2005.

Maharashtra and Mumbai:

Mumbai (Bombay) is the capital city of Maharashtra state and is the most populous city in India, with around 20 million inhabitants. The HIV prevalence at antenatal clinics in Maharashtra has exceeded 1% in all recent years and surveys of female sex workers have found rates of infection above 20%, very high rates are also found among injecting drug users and men who have sex with men.

Tamil Nadu:

When surveillance systems in the southern India state of Tamil Nadu home to some 62 million people showed that HIV infection rates among pregnant women were rising, tripling to 1.25% between 1995 and 1997. Funding for the Tamil Nadu state AIDS control society (TANSACS) which had been set up in 1994 was significantly increased.[1,2]

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1 The Hindu (March 18th 2007).
2 Tamil Nadu state AIDS control Society official website

Another funding for the Tamil Nadu AIDS initiative (TAI) which had been set up in 2003 and working for Aravanis or transgender with a mapping that there were 83,1000 females sex workers and the 30,000 male sex-workers in the states 30 districts of this, the concentration was in the 14 districts where TAI had chosen to work. The numbers of sex workers in these 14 districts of Chennai, Thanujavur, Namakkal, Krishangiri, Erode, Salem, Hosur, Dharmapuri, Theni, Coimbatore, Madurai, Vellore, Karur, Tiruchi was ground 50,000. Today TAI is working with 10,700 Aravanis and Kothis. Tamil Nadu had reported 52, 036 AIDS cases to NACO by July 2005 which is by for the highest number of any state.[1]

Manipur:

Manipur is a small state of some 2.2 million people in northeast of India. The nearness of Manipur to Myanamr (Burma) and therefore to the golden Triangle drug trail, has made it a major transit route for drug smuggling, with drug easily available. HIV prevalence among injecting drug users is above 20% and it has spread further to the female sexual partners of drug users and their children. The HIV prevalence at antenatal clinics in Manipur has exceeded 1% in all recent years. Nagaland also has a similar epidemic.[2]

Mizoram has also a same type of epidemic. HIV prevalence at antenatal clinics has exceeded in 1% in most recent years but was 0.88% in 2005.

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1 The Hindu (March 18th 2007).

2 Info change (August 2003) 'HIV/AIDS in Manipur; the need to focus women.

West Bengal:

The first case of HIV infection in West Bengal was detected in 1986. According to data from voluntary counselling and testing centres (VCTCS) in the state, the number of new HIV infection cases in West Bengal was 304 in 1996. This figure grew to 371 in the year 1971 and further to 1650 in 2005. The last few years, the epidemic has spread to the general population and is no longer restricted to most at risk populations.

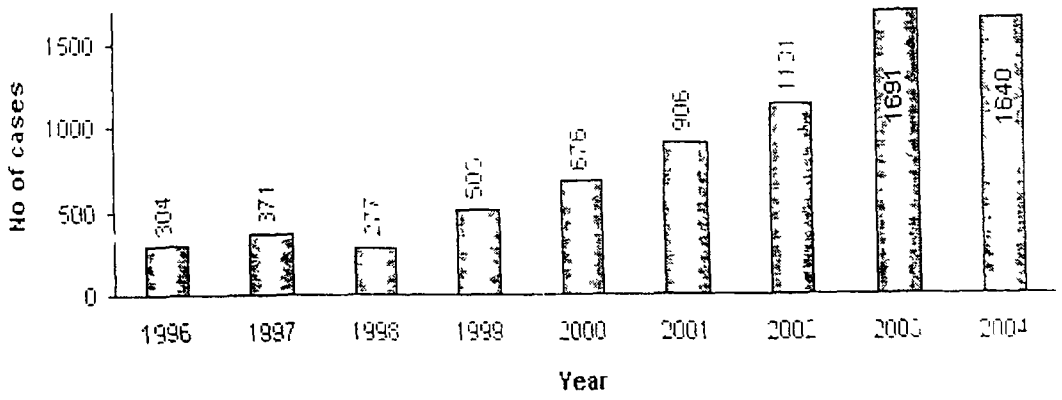


Fig.3.4 VCTC yearly data on new HIV infections in West Bengal (1996-2004), Source WBSAP&CS

The 9th and latest round of HIV sentinel surveillance in West Bengal (conducted in August –October 2006) revealed an average HIV prevalence of 0.90% at nine designated sites for antenatal care (ANC) attendees or pregnant women. This figure is an strong indicator of the general spread of the epidemic in the state and it is also a marker for overall HIV prevalence. In 2004 this figure was 0.43%. 50, 000 people living with AIDS (AIDS cases).

A study of seven districts of West Bengal conducted by the centre for communication and Development, Kolkata, found that 3,558 individual's had

been trafficked during 2000-05 from these districts. The districts covered include Birbhum, Darjeeling, Howrah, Murshidabad, Purulia, South and North 24 Parganas.

Data from the VCTC for the year 2005 showed that unprotected sex (male to female and male to male) remained the major route of HIV transmission in the state, accounting for the 89% of the infections.[1]

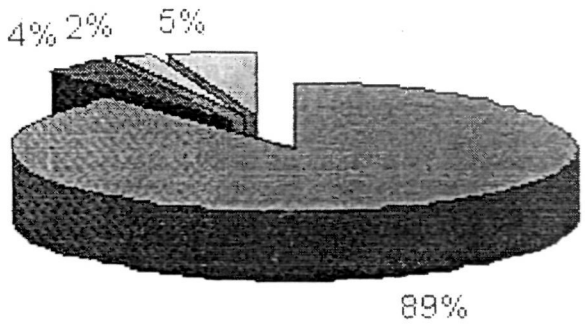


Fig.3.5 : Routes of transmission of HIV in West Bengal (2005), Source: WBSAP&CS

The Capital of India, Delhi:

Delhi has long been noted for its very high rate of population growth. It is one of the fastest growing mega-cities in the world.

[1] www.world pross.org/Asi9/2455. cfm-80k

Growth of population between censuses, 1951-2001.

India and NCT of Delhi.

Census year	Population in Million (000,000)	Decadal Percent Growth	Population in Million (000,000	Decadal Percent Growth
1951	361.1	13.3	1.74	90.0
1961	439.2	21.5	2.66	52.4
1971	548.2	24.8	4.07	52.9
1981	683.3	24.7	6.22	53.0
1991	846.3	23.9	9.42	51.5
2001	1,028.7	21.5	13.85	47.0

Registrar General India.

In Delhi in 2005, it is estimated that 0.4 percent of adults were infected with HIV. Delhi is a major crossroads in India and has become an important hub for trucking and transportation. The migratory population, 900,000 and growing with little or no HIV knowledge.

Other Vulnerable Groups:

- 35,000 female sex workers (FSW), including 7,000 brothel based workers,
- 35,500 street and working children.
- Frequent visitors for business as well as Delhi residents who travel to other cities and return.

❖ An estimated 10,000 intravenous drug users who often share needles.

The extent of HIV/AIDS is estimated by testing at sentinel sites located at government hospitals. Both high and low risk groups are tested by the Delhi state AIDS control society (DSACS). DSACS was as established as an autonomous body on 1 November 1998 and currently operates 12 sites. High risk behaviour groups include intravenous drug users (IVDUs) who share needles, commercial sex-workers (CSWs), patients with sexually transmitted diseases (STDs) and men having sex with men (MSMs).

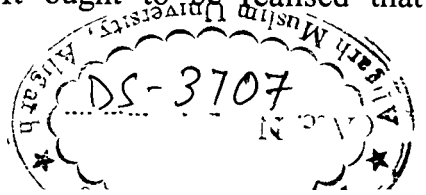
The low risk behaviour group, pregnant women at antenatal clinics (ANCs) who are presumed not to engage in risky sexual behaviour, are taken as representative of the general population.

In Delhi, the proportion of HIV transmitted through sexual contact, 64%, is lower than that of all India at 86%. Transmission by blood transfusion and blood products is about 5% compared to 2.7 percent at the national level. For 26 percent transmission routes are not known.

Concluding Remarks:

AIDS is undoubtedly the most devastating pandemic mankind has ever faced Today, the global community seams to be struggling as the disease rips apart the social and economic fabric of the society by killing people in prime of their youth.

The antire affected population can be counted only if people come forward for testing. It ought to be realised that even 5.7 million is the



population of an average and the numbers continue to grow daily and invisible, as the epidemic silently spreads among all sections of the population. The Indian epidemic in fact, is believed to be one of the fastest growing HIV/AIDS epidemic in the world.

Early, arranged and monogamous marriage is universally prescribed, where girls must be virgins and socialised into submissiveness within the four walls of the home but boys and men are permitted pre-marital and extra marital experiences. There are strict controls upon women's sexuality, but paid sex work is one of the few recourses open to poor, uneducated and unsupported women.

Indian society is full of paradoxes. Its traditional music, poetry and sculpture celebrate romantic and erotic love, its gave the world the treatise of love and sex- the kamsutra, and its great epics are full of stories of romantic attachments including outside of marriage and even accord a place as the 'third sex' to people of alternative sexualities.

It is also driven by hierarchy and social exclusion as finely evolved social principles, making for a long tradition of discrimination relating to a range of social identities such as gender. Caste, skin, colour, disability etc. It is a simple matter of extending these prejudices to a socially and medically complex disease such as HIV/AIDS.

Certain groups in society have an even greater vulnerability to the virus than those others and they are labeled as high-risk groups, these are women in prostitution, men who have sex with men, truck-drivers and migrant workers.

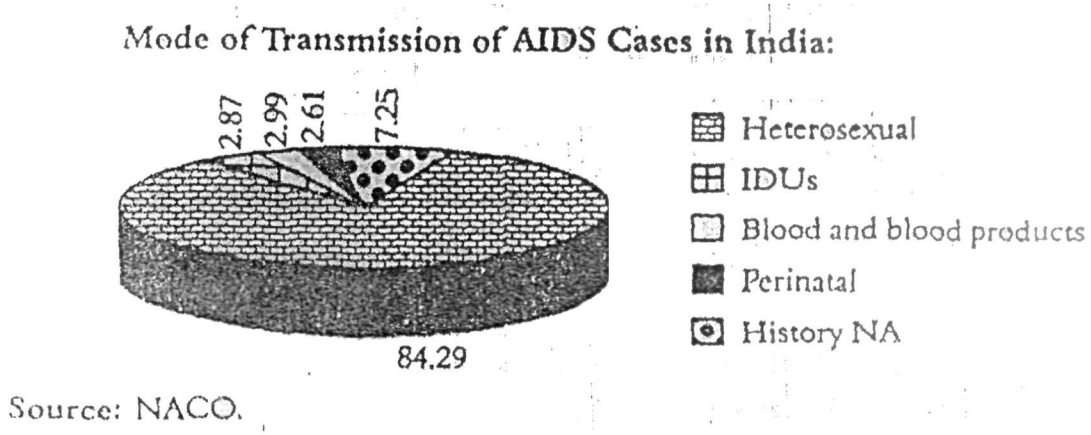
There is a high incidence of HIV infection among workers at the Alang and Mumbai ship breaking yards. Alcoholism is also rampant among them.

Quoting the local Bhavnagar blood bank office at Alang, the survey by the international Metalworkers Federation says there are 38 confirmed cases of AIDS while 50 to 55 new cases of sexually transmitted diseases are reported every week.

India is world's largest ship breaking nation in terms of volume. Migrant workers from Bihar, Uttar Pradesh, Orissa and other states are involved in this most hazardous process. (The Hindu, 11th January 2006).

India has the largest number of people living with HIV estimated at 5.7 million in the end of 2005. Most infections are acquired sexually but a small proportion is acquired through injecting drug use. Injecting drug use dominates in Manipur and Nagaland in the northeast of the country. In this area, HIV infection levels of 60-75%n have been found among injecting drug users using non-sterile injecting equipment.

In the southern states of Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu, HIV is transmitted mainly through heterosexual sex and is largely linked to sex work. According to selected surveys, more than half of sex workers have become infected with HIV. In all four states, infection levels among pregnant women in sentinel antenatal clinics have remained roughly stable at over 1%, suggesting that significant number of sex-workers clients may have passed on HIV to their wives. Through this figure we can easily understand.



Source: NACO.

Fig. 3.6

So, in that condition our vision should be is a world in which people do not die of AIDS. We must try to maintain the dignity of death and offer utmost care to terminally ill patients.

CHAPTER – 4

The Impact of HIV/AIDS on People and Society

CHAPTER-IV

The Impact of HIV/AIDS on People and society

Introduction:

By the late 1990s many governments and major international donors reacted to the growing evidence of the impact of HIV/AIDS on Indian households by suggesting that 'traditional' coping mechanisms would minimize the impact and allow households and communities to absorb the loss of members and of their income, assets and social contributions. This belief had an important political dimension.

HIV/AIDS has profound effects on individuals and the society. Several researchers have measured the social impact of HIV/AIDS at the individual, family and community levels in terms of socio-demographic indices, morbidity and mortality. The way the impact is measured helps shape the public response to the HIV/AIDS problem.

In the case of HIV/AIDS, there is no similar pressure to mount a strong public health campaign at an early stage because the disease remains invisible for many years. During this time, the infection has succeeded in spreading throughout the population. When action is finally launched, the epidemic ha reached the AIDS stage and it is usually too late to avoid its economic and development impacts (figure 4.1). In this chapter I try to outline the major impact of HIV/AIDS on the social and economic structures in India.

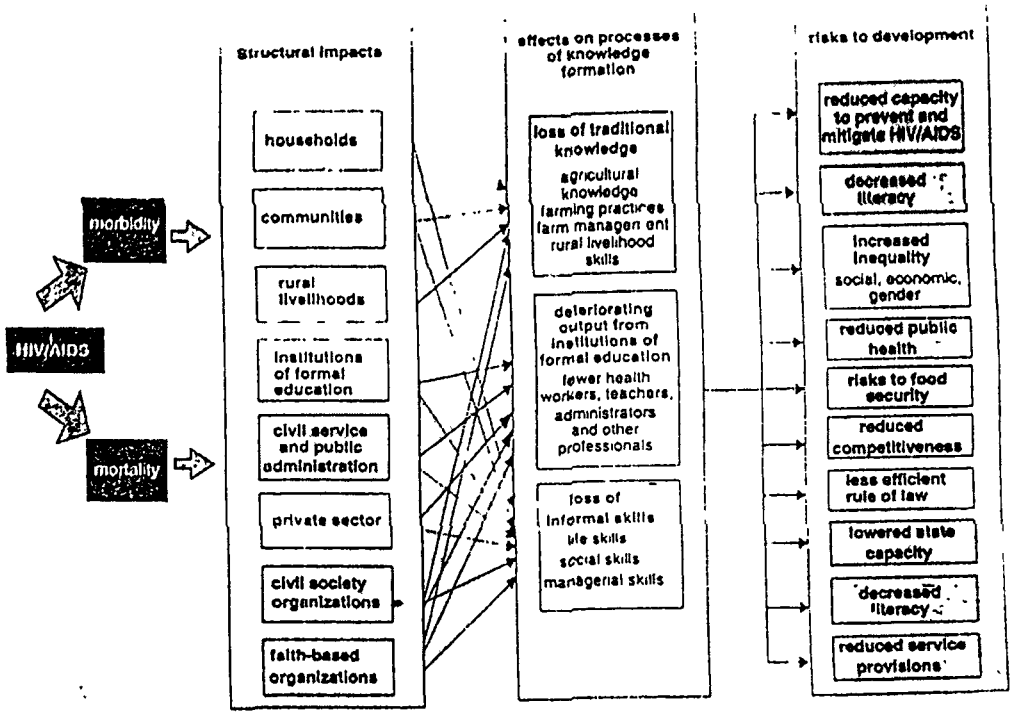


Fig.4.1 The impact of HIV/AIDS on development

Many social and economic determinants such as poverty and societal marginalisation render groups of individuals and their families susceptible and vulnerable to HIV infection. Dramatic economic change in India over the past several decades, for example, have left some households more exposed to the impact of HIV/ AIDS than others. Female and elderly headed households are likewise least able to cope with the economic, labour sand social losses arising from HIV/AIDS. Thus, if want to know whether households are coping with the impact of HIV/AIDS, we need to include the wider socio-economic context in the analysis and identify who is most affected.[1]

Table 4.1 illustrates the possible pathways of HIV/AIDS impact on families and communities. The first and greatest impact is at the level of individual and households. Whiteside (2002) rightly makes the observation that 'macro economic impact takes longer to evolve and the scale and magnitude of

[1] Narain Jai P., 'AIDS in Asia, 2004, Sage publication p. 323-24

macro-impact will depend on the scale and location of micro level impacts. Household-level and Table 4.1 impact of HIV/AIDS at the households levels.

Production and earnings	Investment and consumption	Household health and consumption	Psycho-Social costs
Reduced income	Medical costs	Health maintenance activities reduced	Loss of individual motivation
Reduced Productivity	Funeral costs	Loss of individual motivation	Grief of survivors
Reduced labour use of land	Legal fees loss of savings, change in-consumption and investment	Loss of deceased poor health of survivors Dissolution of household	

Community level impacts are most serious but there are few data about them. From the limited household studies we can draw the following convlusions. First, the impact of adult illness and death.

Second, the effect of illness and death on poverty in households depends on the number of cases the household experiences, the characteristics of individuals and the household's, Composition, community attitudes towards helping needy household and the level of life in that community. In other words, we can say that the poorer the households and communities the worse the impact.

These household observations confirm the fact that morbidity and mortality are putting enormous strain on the capacity of families to cope with the psycho-social and economic consequences of illness.[1]

An orphan is defined as a child under the age of 18 who has at least one parent die. A child whose mother has died is known as a maternal orphan, a child whose father has died is a paternal orphan. A child who has lost both parents is a double orphan.

4.1 On Orphaned children:

As young and middle aged adults die of HIV/AIDS hundreds of thousands of children are orphaned. The growing number of orphaned children is most evident in India, in India there are a number of children had lost their mothers or both parents. There is an estimated 1.2 million invisible children affected vy HIV in India (World Bank, 2002). According to UN-AIDS, 120, 000 Indian children were living with the virus in 2005. The National AIDS control organization (NACO) estimate that around 60,000 new infections occurred last year. Activists estimate that around 250, 000 Indian children are HIV positive today but there is no accurate estimate.[2]

Today India is home to the largest number of AIDS orphan and in the world according to UN estimates. Children orphaned by HIV/AIDS as those under the age of 18 who have last our or both parents to the disease, while

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1 Poku, Nana K., 'The AIDS in Africa,- The poor are dying, 2005, polity press, Cambridge pp-861 89,90

2 The Hindu (May 31, 2006). Left out – Children with AIDS. The Hindu, New Delhi

India's AIDS orphan crisis is not as dire as Africa's, it is an the trajectory that Africa was during the last decade. India is expected to become the next epicenter of the AIDS orphan crisis.

TH escalating AIDS crisis is leaving an unprecedented number of children orphaned with little or no adult protection and care. The proportion of orphaned children is expected to double in the next five years and remain exceptionally high until 2020 or 2030. The orphan crisis is also likely to have an impact in the country's economic and social fabric. The odds against AIDS orphaned children are staggering. These children are vulnerable from social exclusion and economic deprivation to illiteracy, malnutrition and exploitation. They are also at increased risk of contracting sexually-transmitted diseases, abuse and drug use with many young girls turning to prostitution in order to survive. AIDS orphans are often shunned by their communities, many are denied property rights and rights to inheritance. Those who can not be taken in by their relatives and up living on the streets.

Children in HIV/AIDS affected household is begin to suffer even before a parent or caregiver has died. Household income plummets, schooling is often interrupted and many children are forced to drop out either to care for a sick percent or to earn money. Depression and alienation are common. Another working phenomenas is the emergence of child headed household with parents gone, children have to take on the responsibility of earning money. looking after younger siblings and running households. The threats and challenges these children face is compounded by the emotional trauma of losing parents

and stigma, associated with the disease, which marks them out as a new class of untouchables.[1]

Problems among children and families affected by HIV and AIDS

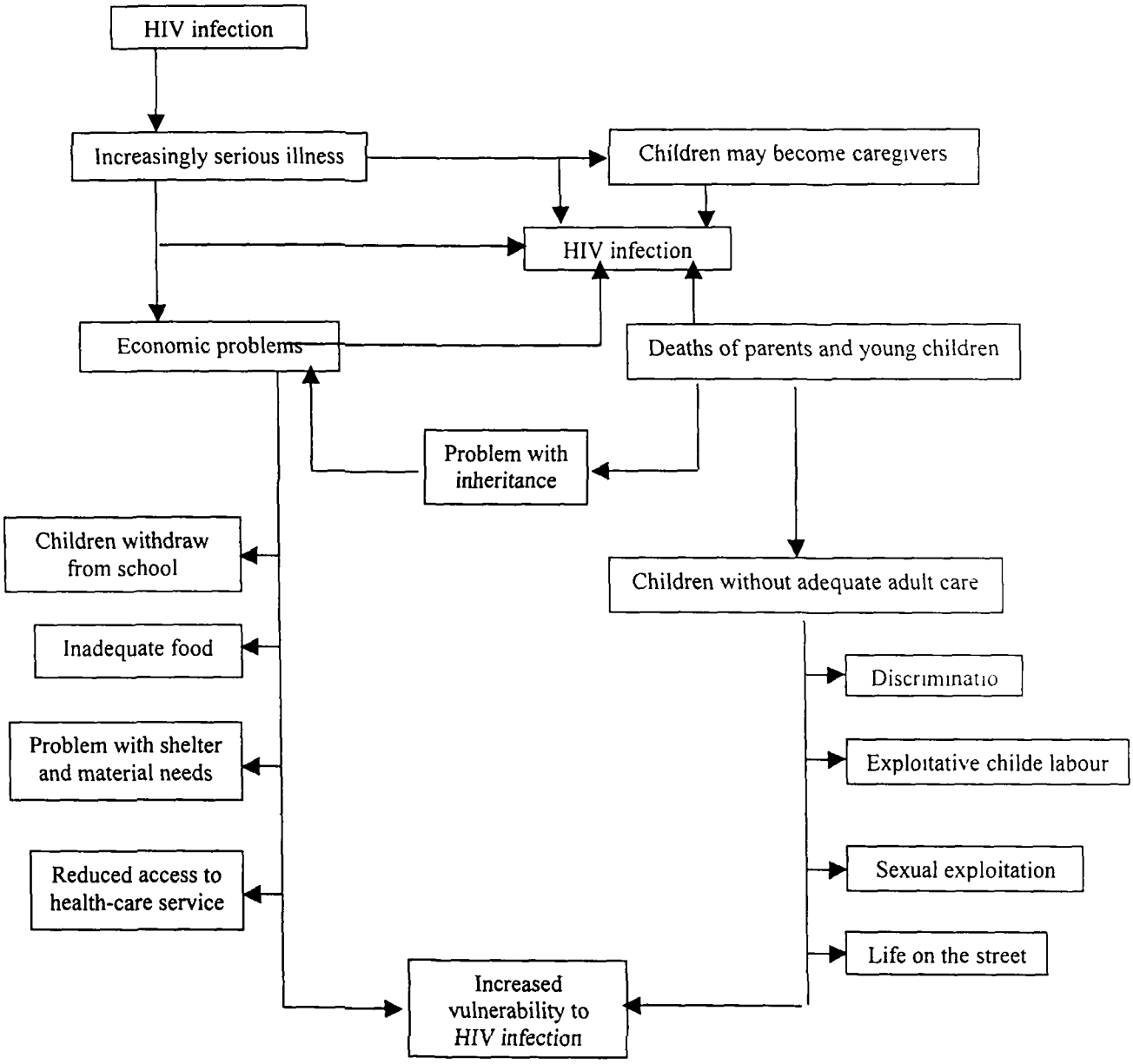

Fig. 4.2

[1] http://www.infochange India org/features 331. jsp.updated.

4.3 Impact on the community:

In Indian community the social impact of HIV/AIDS range from expressions of shock and disbelief to social integration due to irrational fear. discrimination and stigmatization, changes community life, cultural, norms and practices and demographic change due to excess deaths among the adult population.

In most communities the very first groups that experienced the impact of HIV/AIDS were those who were socially disadvantaged and those who engaged in risk behaviour.

Generally community is referred to as a group of people living in the same geographical area or location or administrative boundary's such as a village or a sub-district. It binds together a group of individual who share a common interest across the boundaries of their residential area to respond to HIV/AIDS.[1]

The impact of AIDS is producing a kind of revolution in India-open discussion about sexuality. Which was previously considered taboo, is now a socially accepted form of discourse. Evidence of this is found in Indian English language women's magazine. Indeed, AIDS is forcing women to reexamine their role in traditional Indian culture. To be an 'Ideal wife' endowed with the attribute of unquestioning subservience is now a dangerous role to assume. Another example of change is found in Indian cinema, two films in the 1996

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[1] Narayan Jai P, 'AIDS in Asia', (2004) Sage publications, p-327

Montreal film festival were about subjects that were traditionally considered of limits, lesbianism and trans sexuality.

India is an ancient and multidimensional culture. Cultural Values proscribe sexual relations. Given the close connection between religion and culture, it should come as no surprise that HIV is challenging traditional sexual customs. Though India has numerous tribal communities which also have their own specific practices, the following are some of the most the common religion- cultural sexual practices in India, as

- The tradition of initiating 'poor low caste girl into the devadasi sect. Dedicated to the goddess yellamma when they are young, devadasis historically served priests assisted in religious ceremonies and cleaned temples, with the decline of temples as power structures, however, their role was stripped of much of its religious import and they found themselves selling sex to survive.
- Another cultural sexual phenomenon is that of the 'Hijras'. 'Hijras' are eunuchs and trans sexuals who sell sex for a living. Surveys done by Ram Pal Vasisht, director of New Delhi AIDS control cell (NDACC), suggest however that 'one in three hijras there (Chitti-Pournami festival) is infected with HIV.
- Dangas – Dangas are men who become woman for the duration of chittirai pournami Festival, they will don saris, elaborate wigs, and bight plastic jewelry. They also flirt, saunter and sell sex to other men attending the festival.

Matas; - A beautiful 'harijan' or a low cast child, who attracts the attention of the village land lords and is chosen to become a mata or 'sacred mother', she is then dedicated to a life-meeting her patron's sexual needs, she is bathed ceremoniously in the temple pound, paraded through the village and then sent to a seasoned mata who tutors the girl in her new role.[1]

These practices will need to be reformed in light of the reality of HIV/AIDS, but as evidenced in the rest of the world, it will take time and need to much education to change sexual behaviour which has been considered normative for so long, as the name of culture and beliefs in our communities.

4.4 The impact on Population and population structure:

India has the world's second highest HIV/ Prevalence and faces the greatest demographic impact. In the worst affected country of India, the probability of a 15 year old dying before reaching age 60 has risen dramatically.

HIV'S impact on adult mortality is greatest on people in their twenties and thirties, and is proportionately larger for women than men. In low and middle income countries, mortality rates for 15-49 years olds living with HIV are now up to 20 times greater than death rates for people living with HIV in industrialized countries. This reflects the stark differences in access to antiretroviral therapy. In low and middle income countries mortality generally varies between two and five deaths per 1000 person years (Py) for people in

[1] Shreedhar, jaya, 'HIV Thrives in Ancient Traditions", Harvard AIDS Review, Fall, 1995, PP-10-11.

their teens and twenties. Until recently, low and middle income countries had extended life expectancy significantly.

HIV is not evenly distributed throughout national populations. Instead it primarily affects young adults, particularly women. This means the epidemic is dramatically altering heaving affected countries demographic and household structures.

In recent years, India prevalence levels have increased. Furthermore, the impact of India's long term, high prevalence level is also now becoming visible often representing an extreme shock for affected households dealing with these crises.

- AIDS causes the loss of income and production of a household member. If the infected individual is the sole breadwinner the impact is especially severe.
- AIDS creates extraordinary cave needs that must be met (usually by with drawing other household members from school or work to care for the sick).
- AIDS causes household expenditures to rise as a result of medical and related costs, as well as funeral and memorial costs.

Poor households are particularly in danger of losing their economic and social viability. AIDS affected households also appear more likely to suffer severe poverty than non-affected households and older parents who lose adult children to AIDS are exceptionally prone to destitution.

4.5 Impacts on Rural Livelihoods:

In India, 75% people live in rural areas and depend upon agriculture and agriculture continues to be the primary source of home food consumption and income for those people while the HIV/AIDS epidemics have tended to be more concentrated in urban, peri-urban and local market area, but by 2005 few rural communities had been spared the impacts of the disease. The agricultural base of rural societies in India is affected, as are the livelihoods of many rural people. HIV/AIDS has seriously impact on a range of land issues and livelihood strategies. These issues include different forms of land use, various types of land tenure and reform project that are most appropriate, the functioning of land administration systems, the land rights of women and orphans and inheritance practices and norms.

HIV/AIDS affect rural livelihoods at several levels. It means a loss of labour for food and income production. A survey in rural area found that heads of households who were chronically ill reduced the area of land, they cultivated by half resulting in reduced crop production and lower food availability.

During the period of chronic illness related to HIV/AIDS, households disinvest that they spend down their saving and sell assets to compensate for lost income, and new expenses. In widow, headed households, distress sales and the dispossession of property are increasing to cope with the loss of adult male labour and income.

As adults die, the acquired knowledge of farming practices may be lost. Family members who have to assume new or grater responsibilities for farming

often do so without an adequate understanding of livestock cave, soil and plant types or land preparation methods. A families social and support networks may also suffer as less time is devoted to community formal and informal activities.[1]

AIDS affected rural households have reduced coping capacity. For instance, AIDS tend to cluster in households generally striking individuals in their working and nurturing prime. Then partners and children become infected, and are unable to compensate for the illness of the prime breadwinner or caregivers. Due to families illness, less labour-intensive, non cash crops may be planted and therefore cash may be less available than normally to purchase food. Stored food may be less nutritious. Caring for sick household members may further reduce to capacity to seek other food sources,

4.6 The Macro-economic impact of the HIV/Epidemic:

The impact of HIV/AIDS on individuals, families communities and nations is terribly huge. As people across the globe continue to become affected by AIDS, there is a growing need to look at the pandemic from a macro perspective. Many countries have started exhibiting a significantly inverse relationship between their HIV prevalence rate and gross domestic product (GDP) growth rate Gross domestic product growth rate of a country is measured in terms of total national income as well as the growth in the national

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1 Poku, Nana K., "The AIDS in Africa- The poor are dying, 2005, Polity Press, Cambridge, P-101-102.

income. Growing evidence suggests that as HIV prevalence rate of a country rises, its economic growth and thereby GDP fall substantially.

UNAIDS/WHO report also estimates that majority of households will be forced to spend more on care of AIDS patients and orphans and the disposable income will be less by 13 percent on an average. In hard hit areas households are trying to cope by cutting their food consumption and other basic expenditures and also by selling their assets to cover the cost of health-care and funerals.

In India, the epidemic is estimated to have costed $ 11 billion as direct and indirect costs of AIDS by the end of year 2000. The cost is by no means small and these resources could have been utilized for development or welfasre purposes such as providing food, shelter and health care facilities to the poor people in the absence of the AIDS epidemic.[1]

While the India has focused on the human tragedy of acquired immune deficiency syndrome (AIDS), the cold fact is that economically it is far more damaging than had been thought earlier and could result in the outright collapse of some economies if it is not checked according to two new studies.

A new 116-page world Bank study, released in New York this weak say that if AIDS were to continue unchecked it cold wreck a society in three generations. A similar study prepared by researchers for the United Nations Economic and social commission for Asia and the pacific (UNESCAP) on south east Asia's AIDS problems state that globally, HIV/AIDS is estimated to

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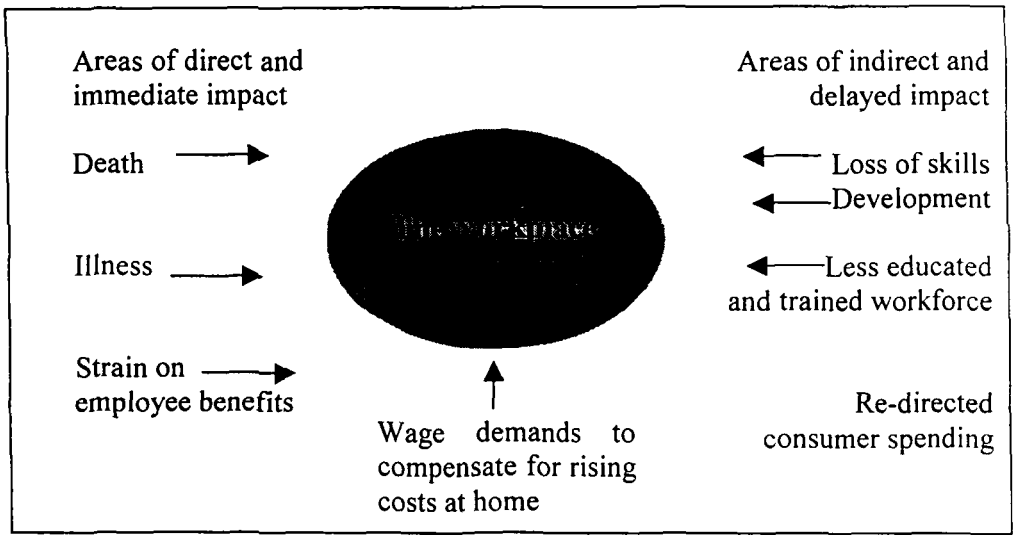
1 WHO (1998). World AIDS Day-Force for change world AIDS Campaign with young people, WHO, New Delh.

reverse annual economic growth by as many as two percentage points in the worst affected countries. As its prevalence increases in any given society, its effect on economic growth worsens.

The world Bank researchers go much further, AIDS impact is more pervious than thought, the say because by killing most young adults, it sets in motion on three generation cycle.[1]

In India such initiatives are unfortunately profoundly lacking on the contrary, majority of insurance companies have excluded HIV/AIDS condition from their benefit plans making the disease more devastating. There lies an urgent need to include HIV/AIDS illness in the benefit plans offered by various insurance companies in order to reduce the burden of the disease. In the long run, this could substantially, help people to enhance their coping ability to the fatal infection.[2]

The present and future impact of AIDS on the work place can understand easily through this figure. 4.3.



1 http://www.a times.com/a times/Global-Economy

2 Sharma; Meenu, 'AIDS Awarness, Through community Participation', 2006. Kalpaz Publication, Delhi.

HIV/AIDS have grave consequences for human and social development. These factors will impact greatly an a country's ability to raise productivity and private and public investment.

For Example;

- Many employees will have children and spouses who are also infected.
- The death of one or both parents will mean that young people will be forced to go to work earlier – sacrificing their education.
- The sustainability of economic growth in India will be threatened in a shrinking consumer market that could result from declines in population growth and the re-direction of consumer expenditure into caring for those who are ill.
- HIV/AIDS will dramatically affect the social environment in which all business operate, even if 'costs' can be contained. AIDS will have an impact on the morale of populations in same way.

These facts are now a part of the business environment in India as well as in other developing regions of the world. They emphasise the importance of local, national and regional interventions that will helps to prevent the continued rapid spread of HIV.

Employers governments and trade unions must understand that a future beyond high AIDS-related morbidity and morality does exist but only it they act decisively now.[1]

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[1] Impact of and interventions AIDS at the work place-workshop Report, August 1997,

In India, given the overall low prevalence of the epidemic the focus of the economic impact of the disease has remained at the individual and household level. But with the HIV/AIDS epidemic expected to infect between 20 million and 25 million people by 2010, there is bound be to a visible impact on India's economy. The first attempt to measure the macro-economic impact of HIV/AIDS was recently done by the New Delhi, based National council of Applied Economic Research (NCAER). The report which was partly funded by the Indian government and the united nations development program, states that if present HIV/AIDS trends continue, there will be a measurable slow down in India's economy over the next 14 years.

The study found that the HIV/AIDS epidemic is likely to bring down the average annual growth rate during the 14 year period by 1% accompanied by a reduction in per-capita GDP. If AIDS continues to spread unchecked, health expenditure of households and government, Will rise, which will reduce national savings, which intern will be have an adverse Impact on investments.[1]

4.7 Impact on the health sector:

Effective strategies to address HIV/AIDS need robust, flexible health systems. However, the epidemic hit just when many countries were reducing public-service spending to repay debt and conform to international finance institutions, requirements on top of this the epidemic itself has contributed to rapid health sector deterioration by increasing burdens on already strapped

[1] http://yale global.yale. edu/display article Zid= 8486

systems and steadily depriving countries of essential health care workers. Staff losses and absenteeism caused by sickness and death mean health care sectors must recruit and train move staff. At the same time, large numbers of uninfected workers are suffering from burnout and emotional exhaustion.

Health care workers need to be sensitized to the effects of AIDS, so they can provide non-stigmatizing care. But HIV/AIDS also adversely affects uninfected patients quality of care, as overburdened health care sectors adopt a triage approach that de-emphasizes patient care for conditions less severe than AIDS.

The greatest tragedy besides the high medical and health care costs, will be the loss of thousands of lives, particularly among young adults in their most productive age and infants born to HIV infected mothers, directly affecting child survival rates. This will have a major impact on the already fragile health in terms of direct medical and patient care costs.

Whether rural health centres or Urban Public hospital many health facilities suffer from a shortage of qualified personnel, equipment and supplies patient care is affected staff were unable to deal with the increased patient load. Over half the nurses expressed dissatisfaction with their jobs and nearly 90 percent reported being overworked. Absenteeism among nurses and other staff increased three fold over the period, adding pressure to the workload of others and adversely affecting the well being of patients.

HIV/AIDS is crowding out services for other diseases, financially and in human terms. Part of the increased workload in health facilities is due to

HIV/AIDS. A growing number of people seek medical care for AIDS and AIDS related illnesses.[1]

Concluding Remarks:

It appears that only a small percentage of affected households benefit from state social welfare and support programmes to mitigate the impact of HIV/AIDS or to reach very poor families. In India, the ministry of labor and social security offers grants to implementing NGOs for street children projects, Education is reforms that have recently occurred in many countries are designed to offer free or reduced free education at primary school levels. These changes do offer some mitigation support to families although many observers note that other costs for school attendance remain.

It is clear that across India, governments are not prepared and are budgetarily constrained in terms of offering financial support to Individuals, families and communities, health systems affected by HIV/AIDS. In fact, most governments with HIV/AIDS policies and programmes stress that care and support will fall primarily on families, little mention is made of mitigation as a role of government.

Several countries have policies or draft of policies, on child welfare. Most countries have signed ILO conventions that define a minimum age for work by children and prohibit children from working in especially harsh and risky occupations. The ability of government authorities full to enforce these

[1] UNAIDS, (2004) report on the global AIDS epidemic p-54.

and related international conventions is incomplete, however, especially given the stresses of poverty and the social and economic impact of HIV/AIDS on households.

HIV/AIDS highlights the failure of the country's economic and social development policies to secure economic stability and a healthy existence for all citizens, for it is those who are already socially and economically disadvantaged, predominantly poor people.

CHAPTER – 5

Awareness Generation and Prevention of HIV/AIDS

CHAPTER-V

Awareness Generation And Prevention of HIV/AIDS

Introduction:

The issue of how best to move forward with comprehensive policies and programmes that aim to mitigate the social and economic impact of the HIV/AIDS pandemic has become a central concern for Indian policy makers. It is now increasingly clear that to achieve this objective, it is essential to address the issues of awareness, care, prevention and support for those affected and to increase the access of PLWHA to effective treatment. Treatment should thus be seen as integral to policies and programmes that mitigate the impact of the epidemic on sustainable development. Indeed it is clear from a review of progress so far in implementing programmes for antiretroviral therapy (ART) that these activities are dependent on the collaboration and involvement of a wide range of partners drawn form the private and public sectors and form civil society.

The aim of this chapter is three fold first, to make, the need for creating AIDS awareness in India or (to make raising awareness about HIV/AIDS in India), Second to conceptualize the scope of recent opportunities for AIDS treatment and care in India; third to highlight some of the major responses by Indian governments in scaling up programmes for prevention for people living with HIV/AIDS.

5.1 Need for creating AIDS awareness in India:

The impact of AIDS is now being increasingly felt by many countries across the globe. The disease is tearing away the social and economic fabric of the global community by killing people in the prime of their youth on whom the society relies for production and reproduction. The epidemic is eroding the hard-earned gains in development indicators by regressing life expectancy rising child mortality rates and leading to a substantial fall in gross domestic product (GDP) growth rate in India.

In India, AIDS is seen not just as, a health problem, but a potential threat to human welfare, development as well as social and economic stability. The challenge to contain the spread of HIV and to convert this commitment into a sustained strategy is the need for the hour. Identifying people with propensity to acquire and transmit the HIV infection and addressing factors that make individuals vulnerable to the disease become crucial.

Statistics from various countries including India show that behaviours that cause the highest risk of acquiring HIV infection are unprotected sexual contact with multiple partners and sharing of needle and syringe. This in turn implies that the most vulnerable groups include commercial sex workers (CSWs), truck drivers, migrant workers injecting drug users, and other youth-groups. While men and women, both are vulnerable to HIV/AIDS but, the latter are more so because of their sexual and economic subordination to men.

Although there has been a growing awareness to identify factors that make individuals particularly vulnerable to HIV infection, that there is paucity

of systematic analysis. The social, economic and cultural situations that create vulnerability to HIV infection have not been adequately studied or explained. Surprisingly, there is virtually no information in here (India) on the basic sexual and drug taking behaviours and patterns of sexual networking that determine how the virus spreads amongst a population.[1]

Although various parts of the world particularly in India have witnessed the epidemic among the diverse populations poverty, lack of skills, violence and harmful social norms are some of the manifestations. The problem is further aggravated by illiteracy. Since many of the populations most affected by the disease are among the India's least educated, there has been a temptation to say 'AIDS is a disease of ignorance'. More than a years into the epidemic, millions of young people know little about HIV/AIDS. According to UNICEF, over 50 percent of the young people (aged 15-24 years) in more than a dozen countries have never heard of AIDS or harbour serious misconceptions about how HIV transmitted. So we, can say there is no single solution to these closely interlinked problems, still since HIV is primarily associated with high risk behaviour changes in individual behaviour would go long way to prevent this dreaded disease. But building awareness regarding HIV/AIDS would be a prerequisite. Gaining awareness and knowledge is the first stage in the process of acceptance of new ideas, practices and change of behaviour.[2]

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1 www.unaids.org.June, 1998, Report on the Global HIV/AIDS epidemic UNAIDS.

2 Seth. M', & Capila, A., (1998). In vasuja Towards Better Health and Hygiene. An Intervauticm in S.U.S. children's villages, Unpublished Master's Dissertation University of Delhi, Delhi. (1999).

Studies have shown that well designed and carefully focused HIV prevention campaigns that rely on increasing knowledge of HIV and how to avoid it, and creating an environment where safer sexual or drug taking behaviours can be discussed and acted upon providing services such as treatment for sexually transmitted diseases, access to cheap condoms and clean injection equipment and lastly but most importantly helping people to acquire the skills they need to protect themselves have managed to arrest or even reverse HIV trends.

The joint united Nations programmes on HIV/AIDS (UNAIDS) along with a host of other UN agencies, countries and partner organisations in developing and advocating the use of 'best practices' which strive to reduce the impact of HIV/AIDS. The WHO and UNAIDS have taken what is termed as the 3 by 5 initiative which aims at providing anti-retroviral treatment (ART) to 3 million people, in areas of most need by the end of the year 2005.[1]

Large-scale information, education and communication (IEC) programmes continue to be implemented, to contain the spread of HIV/AIDS. However, it is important that the message that are seen or sent out must be sensitive to cultures, traditions, the literacy levels and the environment of the people. While designing/ implementing HIV/AIDS awareness programmes many factors need to be taken into account. A 'client centred model' can help

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1 UNADIS/WHO, (December, 2003). AIDS Epidemic Update, December 2004. UNAIDS, Geneva.

service providers to work more effectively with population resistant to behavioural change.

Prevention initiatives that rely on community participation in terms of energy, commitment and spirit of the targeted communities are emerging to be a credible and cost effective solution in combating AIDS. The grass root participation of community members is vital in developing a culturally appropriate programme. Peer-educators are being encouraged and trained to disseminate HIV information and the importance of peer educators to bring about behavioural change.

Another area requiring concerted efforts backed by strong political leadership and high level o public commitment are being stepped up yet behavioural data mapping knowledge, attitude, behaviour and practices (KABP) related to HIV/AIDS reflects an overall lack of awareness coupled with widespread complacency amongst vast population across the globe.

Hence a successful response to the AIDS epidemic calls for a dynamic action in the form of programmes, which are need-based, foster community participation include mobilization of peer educators and empower targeted communities.

December 1, is being observed as the world AIDS Day every year since 1988. The day emerged from a call given by the world summit of ministers of health in January 1988 to promote and coordinate international efforts against HIV/AIDS. In 1997, the first AIDS campaign took place to stress on the need of sustaining HIV prevention efforts all through the year, for HIV/AIDS

awareness, a red-ribbon logo (in Fig. 5.1) was conceived in 1991 by a group of US artists who wanted to draw attention to AIDS.[1] Then it has become an international symbol of HIV/AIDS awareness.

There are same important key who plays an important role in the awareness of HIV/AIDS, as

5.2 HIV/AIDS Awareness Through Religion:

In most continents across the globe the daily lives of people are strongly influenced by spiritual beliefs about God, Supernatural powers and life after death. Religious institutions and preachers from an integral part of many communities in these continents particularly in rural area. They have been known to be powerful influencers and are being currently trained to create AIDS awareness in the communities.

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1 www.unaids.org (October, 1998). UNAIDS, General

India is a multi religious nation, with ethnic and cultural iversities which are indeed richness to this sub-contineut. There are seven main religious groups, namely Hindus, Muslims, Christians, Sikhs, Buddhist, Jains and others.

Each religious faith has excellent organizational structure and has been providing health, Social and educational services in their various communities for several years. Harnessing the already existing inter faith infrastructure and resources along with collaborative interaction to foster better understanding, tolerance and build trust for service delivery is essential. The first inter faith 'Round Table on HIV/AIDS' was held at the urban Health Research and Training institute in Bangalore on June 18-19, 2005, which was coordinated by NACO, UNAIDS and VHERDS. The Round Table reaffirmed the vital influence that religious and spiritual traditions can have on the formation of healthy behaviour and right conscience in individuals and the unique role that the religious heads can play in curbing the HIV/AIDS in the society by being a moral force in the community Faith based organizations (FBOs) thus provide a very credible platform and partnership to address the challenge of HIV and AIDS prevention and control and awareness in collaboration and synergy with the government.

The tremendous impact of religion and the vast outreach potential of various festivals in India have also been used for creating HIV/AIDS awareness. For instance-Indian Health organization (IHO) has organized various HIV/AIDS awareness exhibitions during major festivals such as-kumbh Mela (in Nasik and Allahabad), Ganapati immersion (in Mumbai) and during

Navaratri at various places. In Mysore (Karantaka), a local community has erected a shrine for what they call as AIDS goddess- 'AIDS Amma'. Former Prime Minister, Atal Bihari Vajpayee, addressing a meeting an HIV/AIDS streesed on the need to involve religious institutes in our fight against HIV/AIDS. In his words, "we should also actively involve religious establishments who can have a strong positive influence over large sections of society" in combating HIV/AIDS.[1]

The Evangelical Baptist church (EBC), Manipur, in churachandpur district has decided to actively campaign against HIV/AIDS and distribute condoms despite opposition form religious heads. The church also allowed some of the key NGOs working in Manipur to educate people during Sunday prayers in particular and at regular prayer gatherings.

The EBC was founded in 1948 and it had 40,000 members in Manipur, Mizoram, Assam and Nepal.[2]

CREATING AWARENESS: *Children at an exhibition on HIV awareness in the Evangelical Baptist Church premises in Churachandpur district of Manipur. –*

Fig. 5.2

1 Sharma, Meenu,, AIDS Awareness Through Community participation, 2006, Kalpaz Publication. p-70.

2 The Hindu (December, 26, 2006). Chruch's anti-HIV Campaign. The Hindu, New Delhi.

5.3 Awareness Through Community Participation or Group Meeting:

In the recent years there has been a growing awareness about the HIV/AIDS different communities playing a crucial role. The recognition of community participation or group meeting in facilitating HIV/AIDS prevention efforts led to the reformulation of both theoretical and practical efforts at HIV/AIDS prevention and care.

Community participation or group meeting approaches allow us to study and determine the salient features of the social structure cultureas well as the psychological factors of the community. Parcipatory methodology has also been extensively used to develop culturally appropriate behaviour change programmes. Paula (1996) developed a cultural model for behavioural change, keeping in mind the cultural values of the sample being studied

The social Marketing Initiative (SMI) technique developed by the center for Disease control and prevention (USA) represents a big example of participatory approach. Another programme which is also developed by CDC, is the preventive Marketing Initiative (PMI) approach, engaged in involving, preparing and recruiting young people of the communities to actively assist in HIV/AIDS prevention efforts. Peer-group education is provided by self-help Therapy Groups formed by PLWHA in various countries, which are using self-Help group techniques to give mutual support to each-other. In this same sense. Art therapy support Groups are also trying to reinforce for the awareness of PLWHA.

In India, sonagachi project in Kolkata, TAI (Tamil Nadu AIDS initiative) Programme in Tamil Nadu etc. qualify as an exemplary peer education project that is running successfully among commercial sex. workers and transgender .

In India, under National AIDS control organization's community care and support, the first community care center for PLWHA was inaugurated in New Delhi on 6th April 2000. Researchers observed that community counseling could effectively help in facilitating the community to take the responsibility for change and in this sense it is an indicator of behavioural change and sustainability. (Fig. 5.3)[1]

Creating awareness through community Participation

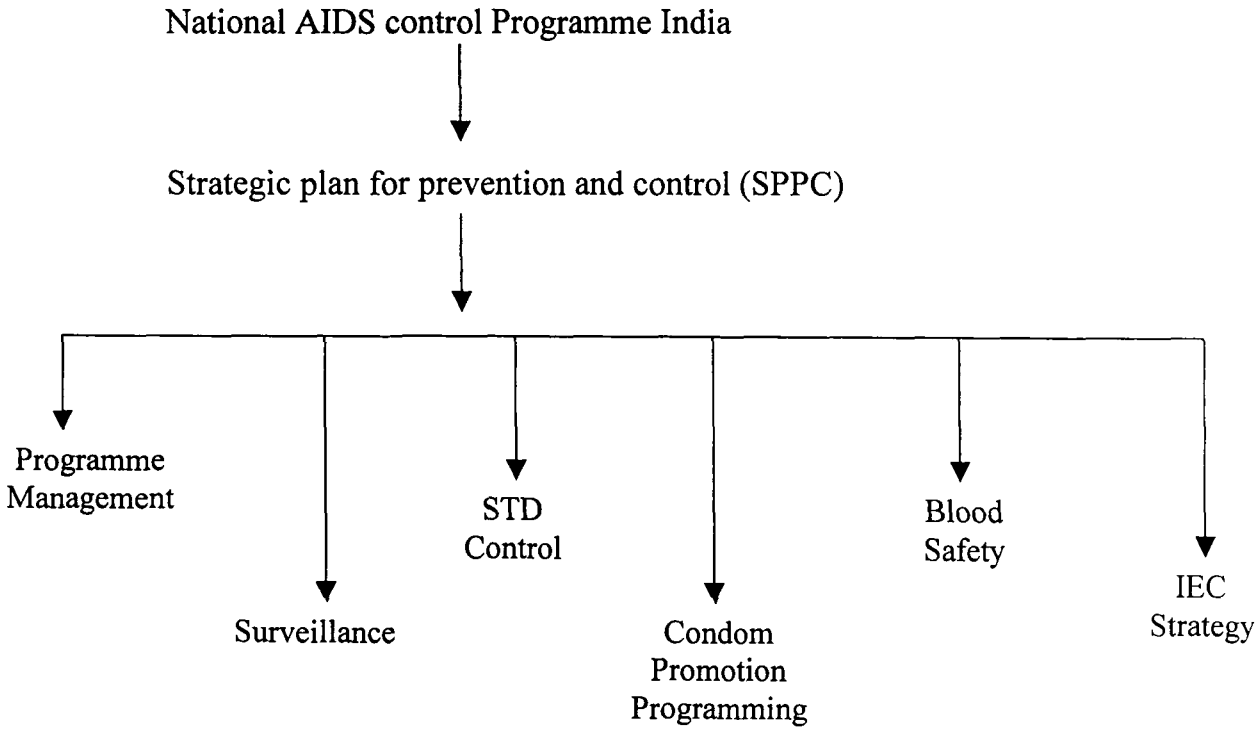
Communities have been at the fore front of the response to HIV/AIDS since the emergence of the epidemic. Mobilising communities or participation in communities to act collectively ensures that the AIDS epidemic is owned

[1] Sharma, Meenu, "AIDS Awareness Through Community participation, 2006, Kalpaz Publication, P-75

and responded to by all levels of society. Thus community participation or group meeting can play a vital role in planning, implementing and sustaining HIV/AIDS awareness and prevention.

5.4 National AIDS control programme in India:

The first case of HIV in India detected in 1986 by the Christian Medical College (CMC) (Vellove), in the blood sample of a commercial sex worker (CSW) from Chennai. After that, a National AIDS committee was set up under the chairmanship of Minister of Health and family welfare. The government of India launched a National AIDS control programme is 1987, with the goal of increasing AIDS awareness. The National AIDS control organization (NACO) was established in May 1992 in New Delhi by the Ministry of Health and Family welfare to manage the activities of the NACP. Fig. 4.3 shows the functioning of the NACP.



The National AIDS control Programme implemented it six strategic plan for prevention and control (SPPC) in 1992.

The NACP is managed at the national level by National AIDS committee (NAC), National AIDS control Board (NACB) and NACO. NACO coordinates, inonitors and evaluates the programme in various states with the support of the National AIDS control Board.

A comprehensive five year strategic plan was launched during 1992-97 with world Bank credit as the National AIDS control programme pahse-I. The second phase of the National AIDS control prgramme (NACP-II) was formulated with the two key objectives of reduction of the spread of HIV infection in the country. Important objectives of this phase include interventions to change behaviour among high-risk group through targeted intervention, decentralisation of service delivery through state AIDS control societies (SACS), protection of human rights and the civil society in general is another feature of this phase. Two landmark policies like National AIDS prevention and control policy and the National Blood policy, were adopted by the government in 2002.[1]

The main objective of the surveillance system is to monitor trends of the HIV epidemic among various groups of population. There are 62 blood testing centers and 9-reference center in the country.

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[1] Govt. of India, Annual Report 2001-2002. Ministry of Health and Family welfare, New Delhi.

Prevention of STIs or STD was taken up as a priority activity. 504 STD clinics as well as 5 regional STD referral centers to deal effectively the STD cases.

Condom Promotion:

The adoption of safe sex is central to HIV prevention and condom promotion is a key component of HIV/STI control prgrammes. Condom supply was organized with the help of Department of Family welfare. NACO has initiated a programme to ensure that good quality and affordable condoms are easily accessible to people especially the vulnerable groups. Emphasis was placed on social marketing of condoms. Condom quality control as described by the WHO have been included in schedule 'R' of the drugs and cosmetics Act.

The male latex condom is used correctly without oil based lubricants, is the single most efficient available technology to reduce the sexual transmission of HIV and other STIIs.

The female condom is an alternative to the male condom and is made from polyurethane, which allows it to be used in the presence of oil –based lubricants. They are larger than male condoms and have a stiffened ring shaped opening and are designed to be inserted into the vagina.

With consistent and correct use of condoms, there is a very low risk of HIV infection.

The United States government and health organizations both endorse the ABC approach to lower the risk of acquiring AIDS during sex:

A-Abstinence or delay of sexual activity, especially for youth,

B-Being faithful especially for those in committed relationships,

C-Condom use for those who engage in risk behaviour. Condom use is an integral part of the **CNN** approach, is

C-Condom use, for those who engaged in risky a behaviour,

N-Needles, use clean ones,

N-Negotiating skills, negotiating safer sex with a partner and empowering women to make smart choices.

Blood Safety:

Blood safety is an integral part of the NACP 154 zonal blood testing centers have been established for HIV screening, 815 blood banks have been upgraded and 40 blood component separation facilities have been established. A National Blood policy has been adopted by the government and an action plan has been draw up to implement it.[1]

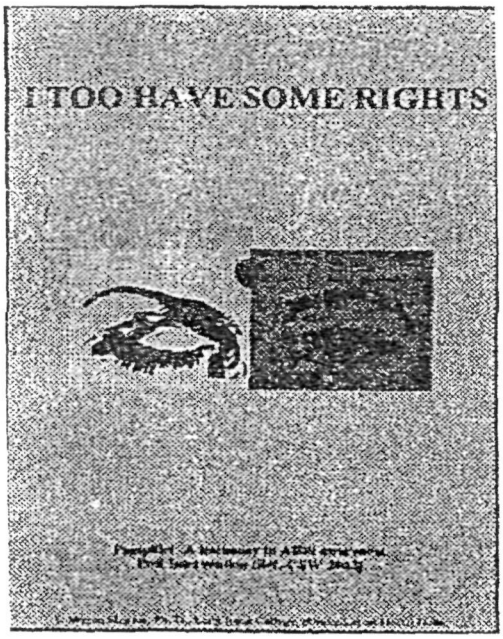
Public Awareness Through Information Education and Communication

Efforts are under way in all parts of the country to educate people about HIV/AIDS. A comprehensive Information, Education and communication (IEC) strategy was prepared by NACO in 1994 at two levels. At the national

[1] AIDS-Wiki Pedia, the free encyclopedia, p-7-8

level political and media advocacy is being enhanced to create a supportive environment and the state level, state AIDS control societies are under taking IEC activities in accordance to their social and cultural context.

IEC strategies are being extensively used in different ways across the globe to create HIV/AIDS awareness. The use of IEC material in the form of audio visual aids has been vitally helpful especially for illiterate people and written text in the form of brochures booklets, pamphlets etc.



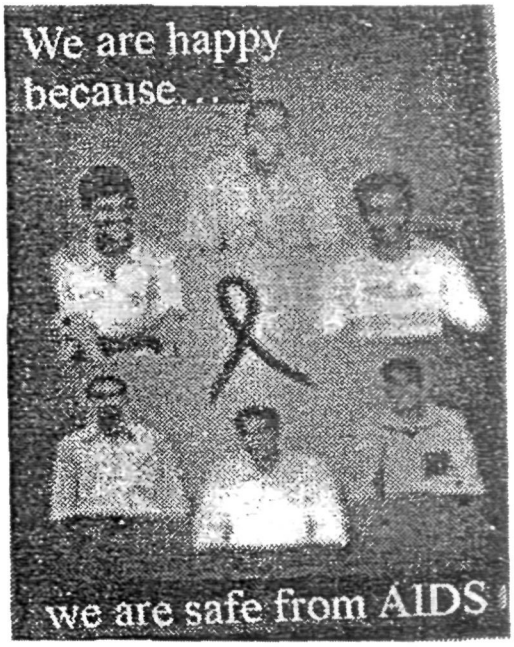


Fig. 5.4 **Brochures** **Pamphlets**

The school AIDS programme of NACO is a crucial intervention to address school going youth of the country. It is an innovative effort that providing peer-driven life skills education to children of classes 9 and 11. It is always implemented through department of education either directly or through NGOs HIV/AIDS education should be given at the primarily level. Education of HIV/AIDS is helping develop safe and responsible life styles, like abstinence and also helping young people resist peer pressure to participate in

risky behaviour. The programme is presently operational in about 40,000 schools.

The UTA (Universities Talk AIDS) programme launched in 1991 for the youths, Which covered 3.5 million students in 4,044 institutions in the contry and this programme is implemented by the National services scheme (NSS) with assistance from the WHO and NACO. The programme was aimed at reaching all universities and 10+2 level higher secondary schools. The UTA is a low cost programme, Which aims to train 10 new peer educators college/ year.[1]

This programme is very near in creating awareness about HIV/AIDS and developing a positive attitude towards sex in boys and girls.

Another programme launched by former chief Dr. Prakash sarang of AIDS control unit in Mumbai, to give education about sex or HIV/AIDS through Museum in 29th October 2002. This programme is a unique programme as comparisons to another programme and this sex museum is established for the first time in India, named as "ANTRANG." This museum shows that sex education is a just like a open diary in our life. This museum is a part of education tour.[2] We can easily understand through this figure.

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1 Park, K; 'Preventive and social Medicine', 2002, M/S Banarasidas Bhanot publisher, p-315-316.

2 Grihashoba, June, 2006, p-80

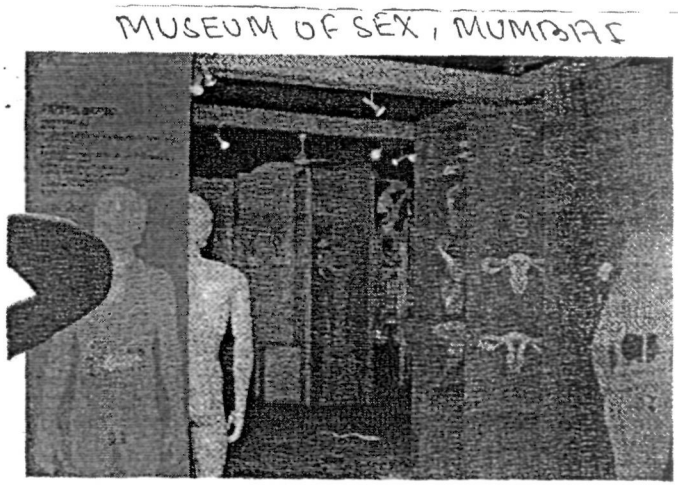

Fig. 5.5

Media is also a very important source for the awareness and prevention of HIV/AIDS. Through media people aware about HIV/AIDS very easily. Kofi Annan, United Nations secretary, general says, 'when you are working to combat a disastrous and growing emergency, you should use every tool at your disposal HIV/AIDS is the worst epidemic humanity has ever faced. It has spread further faster and with move catastrophic long-term effects than any other disease. Its impact has become a devastating obstacle to development. Broadcast medias have tremendous reach and influence, particularly with young people, who represent the future and who are the key to any successful fight against HIV/AIDS. We must seek to engage these powerful organizations as full partners in the fight to halt HIV/AIDS through awareness, prevention and educations."

As AIDS in no longer a public health issue but has become a seriously socia-economic and developmental concern, there is an immediate need to act with an utmost sense of urgency and seriousness. When the diseases, defies treatment, cure has to precede and be identify treatment. Such can be process to

combat and control the menace of HIV/AIDS. Thus, media is one of the instrumentalities which facilitates and gives a directional thrust to the efforts to cure the disease if not to treat it. If medicine can treat HIV/AIDS media is capable to prevent it with an ultimate goal to cure it through its capabilities to import education through entertainment.

An Article entitled 'An innovative approach to reducing HIV/AIDS prevalence through targeted mass media communications in Mumbai, India" focuses on the need for dissemination of related information and realities pertaining to the epidemic so that the ignorance is replaced by awareness and then creating multiplier effects of awareness engulfing the wider cross sections of the society.

Addressing the media leaders summit on HIV/AIDS, the Prime Minister Manmohan Singh Stressed on strengthening the national AIDS control efforts as commitment of the National common Minimum Programme. He emphasised the need for supplementing all such efforts with an active and avid participation from all sections of the society culminating in a mass movement for creating awareness of HIV/AIDS.

The media has the potential to create widespread awareness on HIV/AIDS, to promote the positive attitudes towards PLWHA, and influencing people to change high risk behaviour that make them vulnerable to the infection. It has a pivotal role to play in a fight against HIV/AIDS. It is well known saying that "Education is the vaccine against HIV/AIDS".

According to a survey conducted in India, 90% of Indians identified television as a primary source of information about HIV/AIDS by the end of 2005 and by 2010, 95% of youth aged 15-24 years have information, education service and life skills that enable them to reduce their vulnerability to HIV infection, it is argued by the government of the state at the united Nations Assembly.

There are some roles of media as follows:

- **A channel for communication and discussion:-** one of the roles of media is to open the channels for communication and foster discussions about HIV and interpersonal relations. Addressing HIV/AIDS in the entertainment programmes can have an enormous impact on the society at risk.
- **A vehicle for creating a supportive and enabling environment:-** Mass media can be instrumental in breaking the silence that envelops the disease and in creating an encouraging behaviour for combating with existing social norms and making positive changed in the society. For example, the Indian villagers turn its back on the dowry system after listening communally to Radio soap opera Tinka-Tinka Sukh' (little steps for better life) aired on all India radio and another soap opera ' Mitha Zahar" (Sweet poision) about HIV/AIDS aired on All India F.M. Radio.

- **A tool for creating knowledge base for HIV/AIDS related services:-** The collaborative efforts of all modes of media in association with NGOs state organizations, service providers have brought to the lime light the availability and source for beneficial services like counseling, testing and condom provisions, treatment and social care. The broadcaster and print media have a specific role to play as their efforts have tremendous recall value. For instance, The Kaiser Family Foundation in partnership with media companies have promoted dedicated toll free hotlines and has launched we-sites for educating the people about the HIV/AIDS.

- **Education through Entertainment** for creating an efficacious awareness about HIV/AIDS, the massages need to be informative. educative as well as entertaining as these are mutually exclusive. For instance, in 2002, Doordarshan, NACO and BBC world service Trust joined hand in order to launch the country's mass media awareness programme about HIV/AIDS. The campaign was launched with an idea of spreading education is a more entertaining way with a popular interactive detective series 'Jasoos (Detective) Vijay' and a reality youth show "Haath se Haath Mila', which had won a prestigious Indian Television Awards, 2003 In November 2005, BBC world service trust in association with Doordarshan and NACO were running India's largest HIV/AIDS awareness mass-media campaign. In an interview Richard

Gere, AIDS activist, actor admitted that most public service announcements are unsuccessful as they are not entertaining.

- **The education of HIV/AIDS has to be spread as if we are selling the product:-** Thus a holistic approach for dealing with the emotional, psychological and physical realities to be adopted. The Heroes project is a public education initiative launched by Richard gere and Parmeshwar Godrej to work with Indian media companies and leaders to develop coordinated public education campaigns on HIV/AIDS. It is supported with a grant from the Avahan initiative of the Bill and Melinda Gates Foundation and by the Henry J. Kiser Family Foundation which provide technical expertise to the project. The Bill and Melinda Gates Foundation announced that it will be investing $ 23 million to government of India's HIV prevention response. Heros project which hosts HIV/AIDS awareness show with SUN TV creates a mega platforms, bringing together the south Indian Entertainment fraternity in an effort to draw public attention to the issue of HIV/AIDS. Even star celebrities are playing an important role. An actress, Prachi Rathore, has been awarded with special Max stardust award, 2005, for contribution towards creating awareness about HIV/AIDS in Rajasthan Movices like 'Phir Milenge' and 'My Brother Nikil' are an attempt in educating people with entertainment.

- **Mainstreaming:-** Broadcaster are mainstreaming the HIV issue across a number of programmes, ensuring that the message permeates a diverse

range of output, not just outlets and public service messages dedicated specifically to the issue. A coordinated multifaceted campaign has greater impact than a single programme Documentaries, New-items, concerts, hotlines, books and websites can be linked together to reinforce awareness, information and messages about HIV related attitude and behaviour.

- **Media as an institution** of oversight, restraint and collaborative efforts. Media can render yeoman, Service in providing accurate and correct news coverage of HIV/AIDS facilitates eliciting and generating public response to states sponsored efforts. Such efforts have the potentials to awaken socio and political leaders to review their strategies in regard to policy concerning HIV/AIDS.

In such a process, the media has the potential to influence public opinion and attitudes about HIV/AIDS and PLWHA. When the media focuses on a particular issue, there is a higher degree of public awareness and support to tackle that issue.

Media combats the disease through public education and awareness as the disease is not only a battle against a virus but is also a battle against the stigma and discrimination, cultural taboos and ideas.

Media is contributing in a global fight against HIV/AIDS as it plays an essential role in reversing the progression of HIV/AIDS. Let us, hope that media continues to play a key role in reversing the progression of HIV/AIDS.[1]

Awareness through media, e-quiz and games are also playing a very important role in HIV/AIDS awareness.

Union minister of youth affairs and sports, which is launching an online quiz programme to test your knowledge and awareness about sexual health and HIV/AIDS celebrity quiz master Siddharth Basu will anchor the programme. According to ministry secretary Sy. Quraishi "youth spend hours playing cricket and shooting rockets through online games. We want to absorb some of this time in teaching them about sexual health and primarily AIDS through entertainment. "(The times of India' June, 17, 2006).

Over 30 question have been selected by a team of experts from UNAIDS, UNFPA, NACO and UNICEF and these quiz question will be available at the portals of yahoo India. The web-based quiz is a part of the YUVA (Youth Unite for Victory on AIDS) programme to be launched on June 27 by the ministry Vice-President Bhairon Singh Shekhawat.

YUVA is a five-year plan and action agenda aimed at reaching out to adolescents and youth across the country to ensure that by 2010, all young people have access to accurate information and HIV prevention service and facilities in a conclusive, safe and supportive environment.(The Hindu, June 28, 2006).

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[1] www.boloji.com/society/086.htm

There is also development of games for the treatment of specific ailments. The Mobile gaming championship organized by Nokia in the recent past, attracted more than 26,000 people across the country and the cash prize being Rs. 10 lakh.

On December 1st, 2005 (National AIDS Prevention Day), New Delhi, based ZMQ systems unveiled four mobile games. Using edutainment as their platform. ZMQ software systems plans on educating people about HIV/AIDS through these games-safety-cricket, Ribbon chase. Messenger and quiz with Babu.[1]

5.6 Non-Governmental Organizations (NGOs)–A complete set of NACP

In India, a number of NGOs have responded very positively to the HIV/AIDS epidemic. The role of NGOs in reaching the marginalized groups is vital. Many NGOs continue to help in preventing new HIV infections through awareness generating activities, some of the NGOs recognized for their efforts in combating HIV/AIDS epidemic care.

a. **AIDS Awareness group (Delhi):-** working with commercial sex workers

b. **Calcutta Samaritans (Kolkata):-** working with street children

c. **CINI-Asha (children in Need institute, Calcutta):-** working with street children.

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[1] http//www.zdnet India.com/insigtht/persenaltech/stories/159763.html.

d. **Community Health and Education society (Chennai):-** working with children

e. **Kripa-foundation (Manipur):-** working with street children for community based rehabilitation.

f. **Naaz foundation (Delhi):-** working with men who have sex with men (MSM).

g. **Prayas and Prachi (Delhi):-** working with different communities .

h. **Prerana (Mumbai):-** working with children.

i. **Sharan (Delhi)**:- working with intravenous drug users (IDUS).

j. **Society for Promotion of youth and Masses (SPYM) (Delhi):-** working with truck-drivers.

k. **Sangram (Maharashtra):-** working with women in prostitution and sex-work.

NGOs remain passive in exchanging information and reluctant in coming together in a coalition formal, and it can provide information, services and other social support systems to people in danger of catching the disease.

5.7 UNAIDS Support to the National Response:

The "3 by 5" initiative, supported by WHO and UNAIDS, was implemented in India with a slow uptake. The number of using antiretrovirals increased to a little over 18,000 by December 2005.

- UNICEF has been supporting AIDS awareness using the school system and out of school education mechanisms. UNICEF and UNAIDS has

been the engine of the "communication consortium" an initiative requested by the National AIDS control organization to coordinate behaviour change communication. In 2005. UNICEF and UNAIDS launched a major Paediatric AIDS initiative with intensified work on prevention of mother to child transmission, increased community care, support to treatment for children and children care for orphans and vulnerable children.

- UNDP has coordinated the response to the Tsunami including the HIV component. UNDP and UNAIDS have supported the AIDS community of practice, which is the most successful in India and gathers more than 2000 professionals civil society members.
- UNODC has undertaken a whole set of initiatives for the reduction of impact of HIV on injecting drug users UNODC has taken the lead in coordinating UN support in the northeast.
- ILO has stepped up its work on HIV in the work of work, enrolling a large number of companies and professional associations and designing new guidelines and support document. ILO has also worked in close cooperation with unions, both in the formal and informal sectors.
- UNFPA has taken the lead in the Reproductive and child Health programme of the Ministry of Health and Family welfare with a major contribution to condom promotion and logistics.
- UNESCO and UNAIDS have worked on AIDS awareness in the education system and through the National cadet corps.

The most important role of the UN, in particular the joint UN team on AIDS, will be the development and implementation of a strategic. UN implementation support plan in support of the third phase of the National AIDS control programme, as an integral part of the UN Development, Assistance framework process commencing in March 2006.[1]

5.8 Testing and Treatment for People living with HIV:

The general consensus among those fighting AIDS worldwide is that HIV testing should be carried out voluntarily, With the consent of the individual concerned. This view has been supported by the Indian government and NACO, Who have helped to establish of hundreds of voluntary counselling and testing (VCT) centers in India. By the end of 2005 there were 873 VCT centres in India compared to just 62 in 1997. These centres tested 225,600 people for HIV during 2005.

Voluntary testing is officially supported in India, some states have tried to implement policies that would force people to be tested for HIV against their will. In Goa, Rajasthan, the state government recently planned to make HIV tests compulsory before marriage and in Punjab it has been proposed that all people wishing to obtain a driver's license should be tested for HIV.

It is scientifically proven fact that timely and appropriate treatment of opportunistic infections could improve the quality of life of positive persons and retain their usefulness to family and community. Treatment with drugs for

[1] National AIDS Policy, http://www.Indican embassy. org/policy/AIDS/Sources-AIDS-India html.

opportunistic infections works best when it is accompanied by good nutrition and psychological support (that helps patients stay optimistic and comply with the requirements of the therapy they are undergoing)[1]

HAART, a form of treatment involving ART (anti-retroviral Therapy) in 1996. combination ART is a cocktail of three anti-retroviral (ARV) drugs that is stavudine, lamivudine and Nevirapine derivative mixed together to prevent drug resistance. It brings down the viral load and boosts the immune system and delays the progression from HIV to AIDS. It thus holds out the real possibility of improving the quality of life and longevity of those already infected. One form of ART is available as Post-Exposure prophylaxis (PEP). if taken within three hours of exposure or at the most within 72 hours of a needle stick injury (accidental prick from an infected injection needle or surgery equipment to health personnel or home-based carers of positive patients) It can protect the person from the infection. It is possible for people to live fairly long lives just as they would in the case of any chronic disease, provided that ART is administered in a timely manner. Apart from its humanitarian impact. the strongest argument in support of ART is that the knowledge that HIV/AIDS is a treatable disease may act as a spur to voluntary testing and treatment and through the effect of breaking the cycle of transmission, have a significant impact upon public health. The government has started to expanded access to ARVs in a number of areas, and the national number of ARV centres increased from 25 to around 70 in 2005 alone. They plan to increase this number to 100

[1] http://www.avert.org/inida.aids.html.

and to increase the number of people receiving ARVs to 100,000 by the end of 2007.[1]

They are also plan to improve the provision of nevirapine to pregnant mothers with HIV, which can significantly reduce the risk that they will pass infection on to their child. Now in India there are some drugs for pregnant women who are HIV positive can get safe baby. HIV-Positive men in India could soon father of healthy kids without infecting their wives are children, through the latest sperm washing treatment, in which individual sperms are removed from the semen of an HIV positive then used on his wife through artificial insemination. This way, the sperms are rid of HIV. This treatment ensures that an infected women can have a healthy baby without having unprotected sex with her HIV-positive husband. AIDS scientist Suniti solomon, Who is also director of the YRG centre for Aids Research and Foundation, said, "even if they are married to HIV positive husbands women across the globe still want to be mothers. Sperm washing treatment is a great new technique that can fulfill this desire without risking the woman's life. In this procedure, the semen of an HIV positive man is taken centrifuged in different gradients, removing the virus and then introduced into the women's body. The woman then conceives without picking up the virus". (The times of India 22 April, 2006).

For the first time in India, 2000 child patients put on life-saving Drugs meant for them, with a paediatric HIV treatment protocol, below 15 years on

[1] Ramasubban. Radhika, Rishyasring. Bhanwar; 'AIDS and Civil society;. India's leering curve', 2005, Rawat Pyblication, p-46.

life saving pediatric drug formulations to treat HIV. Till now, drugs under the Anti Retroviral Therapy (ART), the only treatment available for those infected with HIV/AIDS were administered on children by dividing fractions of adult formulations according to the child's age, which often led to under or over-dosage through human error causingh resistance to the drug.

India is also making CD-4 count free for children. The CD-4 count tells the doctor how strong the immune system is and the stage of the HIV infection. (The times of India Nov. 18). In India HIV/AIDS vaccine raises in near future for treatment. Nobel laureate and a leading immunologist peter Doherty expressed scepticism that any of the 30 vaccines undergoing trial would provide absolute protection against HIV/AIDS.

According to International AIDS vaccine Initiative (IAVI), a 50 percent effective vaccine given to just 30 percent of the population could cut the number of new HIV infections in the developing world by more than half over 15 years. According to analysis, a high efficacy vaccine (70 percent) with 40 percent coverage could avert 56 percent (28 million) of new infections worldwide by 2030 (The Hindu March, 17, 07).

Above all discussions there are some preventive measures against HIV/AIDS as follows:-

1. Avoiding multiple sex-partners,
2. Using fresh syringe and needle or dispensing syringe and needle in infections,
3. Demand in the saloon for the use of a fresh blade,

4. Ask for AIDS test before transfusion of blood,
5. Never recycle the blood stained bandage, cloth, needle or syringe.
6. Breast milk is the best food and allow your child to be breast feed.
7. Some physicians suggests that even a mother baby with HIV/AIDS diseases need to feed her baby with breast milk.
8. Milk banks established in hospitals need to test for AIDS and provide milk to the children.
9. The blood banks need to regularly check for AIDS when the blood is donated and again test before giving blood transfusion. The government need to strictly regulate this protocol and frame appropriate laws.
10. AIDS patients need to be strictly monitored for preventing further infection. They need to be looked at sympathetically and their needs must be met urgently.
11. Narcotics and drug addicts need to be monitored for a longer period in order to check for AIDS.
12. Regular sexual partners need to be monitored for a longer period by the government and they need to be provided condoms free of cost.
13. In India there is a need to introduce a special chapter on AIDS in Biology text books in schools and provide for a round-the-clock counselling hot line service.
14. Video films on AIDS and modes of preventive measures need to be shown to all students.

15. Film theaters must show documentary on AIDS before screening any movie.

16. The internet sites on AIDS and preventive measures need to be made more popular for the cyber net users.

17. Radio bulletins must be broad casted periodically on AIDS and its prevention and awareness.

18. The literature on AIDS and its prevention must be made available to everyone at low cost in all Indian languages. Government must subsidise the production of AIDS educational material and publications.

19. The local folklore, skits, plays, dramas on AIDS prevention messages will educate the illiterate public.

20. Government must produce condoms in great number and population its use.

21. Billboards can be prepared in local languages about AIDS and its prevention and awareness and be displayed in public places prominently for educating the public.

22. P. H. Cs in rural areas and paramedics need to be educated to identify AIDS cases if any and refer them to hospitals for treatment and promote preventive measures.

23. The research concerning immunological aspects need to be strengthened in order to understand the nature of the virus and find suitable medicine within the country or abroad.

24. Elisa and western Blot test are costly. The government of India through the National AIDS surveillance programme in 43 centres need to develop and strengthen testing facility at reasonably low cast.

25. Illiteracy poverty and malnutrition are prevalent in many states. These factors increase the chances for the development of the AIDS. The efforts need to be made to increase general standard of living.[1]

Concluding Remarks:

To conclude awareness and prevention of the global community from HIV/AIDS has become an important research area. The epidemic is the underlying cause for reversal of hard earned progress on growth and development indicators. Today awareness about HIV/AIDS and prevention from HIV/AIDS has become our prime necessity. To protect and aware high risk populations from HIV/AIDS is a challenging yet, an urgently needed task since these groups are serving as bridges for HIV transmission form the high-risk behaviour population to the general populations.

India is known to have around 5.7 million HIV infected people (NACO, 2005), the second largest in the world. Statistics continue to confirm that this number is rapidly growing. Thus, many programmes for the common masses as well as targeted interventions for the vulnerable groups are being implemented across the country with the aim of creating HIV/AIDS awareness amongst them.

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[1] Rajawanickam', M., "Psychological perspective of HIV and AIDS", Concept Published company, 2006, p-81

Awareness for sure hold the key to success in containing the spread of the epidemic. People who are aware/ educated are known to adopt measures to protect themselves and take properly treatment from the virus as compared to those who are unaware about the disease. Hence their lies an urgent need to create AIDS awareness among masses especially those who face increased vulnerability to the disease. But unfortunately in India the task of creating AIDS awareness is complicated by various factors such as illiteracy, socio-cultural taboos and restrictions, adherence to gender inequality as a norm as well as economic compulsion.

Educating people about HIV/AIDS is complicated in India, as a number of major languages and hundreds of different dialects are spoken within its population. It means some HIV/AIDS education and prevention and awareness about HIV/AIDS can be done at the national level, many of the efforts are best carried out at the state and local level.

Each state has its own HIV/AIDS awareness, prevention and control society, which carries out local initiative with guidance from NACO. Under the second stage of the governments National AIDS control programme, which finished in March 2006, State AIDS control societies were granted funding for youth campaigns, blood safety checks, and HIV test among other things, various public platforms were used to raised awareness of the epidemic that is, concerts, religion, community participation. Voluntary organizations radio, dramas, a voluntary blood donating day games and TV spots with a popular Indian film-star. Messages were also conveyed to young people through school.

Teachers and peer educators were trained to teach about the subject and students were educated through active learning sessions, including debates and role playing.

The next stage of the National AIDS control AIDS programme will see US $ 2.5 billion spent on fighting HIV and AIDS, most of which will be spent on prevention. Aside from the government, this money will come from non-governmental organizations, companies and international agencies, such as the world Bank and the Bill and Melinda Gates Foundation.

The government has announced that this campaign will place a strong focus on condom promotion and it has already supported the installation of over 11,000 condom bending machines in colleges, road-side restaurants, stations, gas-stations and hospitals and plan to increase this number 100, 000 by the end of 2007. With support from the United states Agency for International Development (USAID), the government has also initiated a campaign called 'condom Bindas Bol!' which involves advertising public events and celebrity endorsements. It aims to break, the taboo that currently surrounds condom use in India and to persuade people or aware people that they should not be embarrassed to buy them.

In one unique scheme, health activist in West Bengal are attempting to promote condom use through Kite flying which is popular before the state biggest festival, Durga Puja, to conveying message that, "The colourful kites carry the message that using a condom is a simple and instinctive act and they can fly high in the sky and land at distant places where we can not reach."

CHAPTER – 6

Conclusion and Suggestions

CHAPTER-VI

CONCLUSIONS AND SUGGESTIONS

"Diseases are not natural immutable categories waiting to be discovered. They must be examined as contingent and historically specific struggles over who, and what purpose, provides the definition and makes the diagnosis"

The present study concludes with the proposition that impact of HIV/AIDS on society, awareness, care and empowerment of communities. "(ACE STRATEGY)" is imperative in combating HIV/AIDS. To effectively control the spread of the HIV, it is prudent to delve into and address various issues that make people vulnerable to the disease informational HIV/AIDS prevention campaigns may not have all the answers to keep the HIV/AIDS under check. Poverty, illiteracy, exploitation, substance abuse, conservatism are all inseparable parts of the health-care and health seeking behaviour. Dreaded diseases like HIV/AIDS thrive in abysmal living and work environment. People are more prone to such infections when they live under sub-human conditions and this is a disabling environment for right thinking and action. As poverty leads to a feeling of helplessness and apathy towards the disease, its roots need to be trimmed.

As far as mass-media approach to combat AIDS is concerned, innovative need-based strategies that rely on interactive and interpersonal modes of communication should be developed and implemented rather than

having one sided communication from top. The provision of basic health care services to the marginalized groups in a non-discriminating environment becomes a requirement for a win-win situation. Trust builds confidence and the latter builds a life of quality.

Acquired immune Deficiency syndrome (AIDS) is recognised as the most devastating disease human kind has ever faced. The epidemic began in 1981 in U.S.A and in India the epidemie began in 1986 in Chennai, and by the end of the year 2005, nearly 5.7 million people living with HIV/AIDS in India. The disease is caused by the Human immuno, Deficiency virus (HIV), breaks down the immune system of a body completely to combat infections.

The virus remains dormant for 5 to 10 years before the on set of full blown AIDS which is always terminal. Today, AIDS is rapidly wiping out the hard-earned gains of human development in terms of regressing life expectancy, rising child mortality rates and killing the most productive and reproductive population in the prime of their youth. The economic impact of HIV/AIDS in terms of costs resulting from treatment and care of people living with HIV/AIDS (PWHA) is magnanimous.

With the rising spread of HIV/AIDS there has been a growing emphasis on understanding its epidemiology and manifestations. Various factors such as biological, socio-cultural, economic, Political and Psychosocial have been broadly seen as causing the spread of virus. Migration, prostitution, machismo behaviour, low literacy level, prevalence of myths and misconceptions further aggravate the rapid spread of the disease. It is seen that the infection is rapidly

spilling from populations with high-risk behaviour to the general population and also from urban to rural areas. Since there is no sure cure for the disease, its prevention becomes paramount.

There are only four well-defined routes by which HIV is known to spread. These are through sexual inter-course with a HIV infected person by exchange of infected blood and blood products as in transfusion, by sharing of contaminated needles/ syringes and lastly transmission from an HIV infected mother to her child before, during or after childbirth. Although, no culture or community is known to be immune to AIDS yet, certain populations are more vulnerable to the disease because of their high-risk behaviours. These are the commercial sex-workers, the truck drivers and the rickshaw pullers, and migrant workers, sex related indulgence is common in these groups.

There is a global reaction and response to HIV/AIDS advocating the importance of education, awareness generation and also for adopting 'safe-practices'. Here "Safe practices" has connotations to safety in sexual acts and medical safety (against sharing of needles and syringes). Many millions known nothing or too little about the virus to protect themselves against it. We can say, low level of knowledge coupled with myths and misconceptions are driving the disease out of control.

The UNAIDS along with other cosponsors is striving to lead and assist in an expansion of the international response to HIV/AIDS, various NGOs, along with government bodies, also the private sectors are putting in their best efforts to launch "Global Media AIDS Initiative". The initiative aims to

activate media organizations to reach the world's people especially youth with information about how to prevent and treat HIV and to help combat AIDS related stigma and discrimination. These include efforts in developing and implementing programmes to bring about changes in knowledge, attitude beghaviour and practices (KABP) of people with regards to HIV/AIDS. In the absence of any cure for HIV/AIDS presently, creating HIV/AIDS awareness takes on a significant and life-saving role. Knowledge is seen as power, so, integrating life-skills education into HIV/AIDS prevention programmes would be the basis for awareness generation and for health-seeking behaviour. "When you are working to combat a disastrous and growing emergency, you should use every tool at your disposal."

In India, various surveillances as well as KABP studies continue to show an overall lack of awareness among the masses about the disease its prevention especially amongst the some of the most vulnerable populations (Times of India, July 4, 2003). The HIV prevalence in India, has risen to alarming levels with 5.7 million people living with the virus by the end of the year 2005.

HIV/AIDS is a major public health problem with deep economic and social consequences. HIV is not spread randomly. In majority of cases, it is transmitted as a consequence of purposeful behaviour, India has a huge migrant population. Rural-Urban migration also is significant especially in states like Maharashtra, Tamil Nadu, West Bengal and Delhi.

In recent years the researchers began to recognize the fact that the epidemic is more than just a health problem. There is strong evidence of the link between economic, sociological forces and HIV transmission. Many economists and sociologists are of the opinion that the epidemic will have a substantial negative impact on national economic well being. United Nations agencies engaged in the study on the economic and development implications of the epidemic express similar views. The world Bank report (1993) states "AIDS, affecting as it does mainly people in the economically productive adult years, had powerful negative effects on countries." The United Nations Development programme (UNDP) states that "the extent of illness and death caused by the epidemic could deplete critical sectors of the labour force, and adversely affect every sector of the economy. The consequences will be inexorable and awesome" (UNDP, 1992).

Innovative ways to reach masses and provide them with crucial awareness and knowledge about HIV/AIDS by ensuring their participation. seem to be the ideal methodology. Experience across the globe shows that awareness about the disease brings about desirable changes in peoples behaviour. Interventions such as the Sonagachi project in Kolkata (India). AIDS Euro-peer project (Europe) and the Prevention Marketing Initiative (USA) are some of the success stories in bringing about significant behavoural changes made possible by the HIV/AIDS awareness campaigns. The programmes should address the specific needs of communities keeping in mind their socio-cultural ethos.

The HIV/AIDS problem also highlights deficiencies in the existing social protection systems in developing countries, like India. A common intervention to mitigate social impact is psychosocial support through provision of counselling services. Most persons affected by HIV/AIDS face difficulties in living their daily lives, responses to meet such needs from the government and NGOs are neither comprehensive more wide in coverage and are considered marginal and fragmented Table 6.1. Shows the examples of social impact in particular groups affected by HIV/AIDS and potential responses-

Population group	Nature of Social Impact	Results	
		Emerging Problems	Preventive measures
Babies/Children	➢ Psychological trauma due to stigmatization and discrimination ➢ Forced to leave School ➢ Forced into orphan age.	➢ Limited availability of orphan age homes ➢ Providing foster families. ➢ Family members, relatives help taking care after death of parents	Preventing mother-to-child transmission by providing ARV and formula milk

Wives/Widows	➢ Psychological trauma due to stigmatization and discrimination ➢ Inheritance rights	➢ Counselling services ➢ Temporary Shelters	➢ None
Parents/elderly	➢ Psychological trauma due to stigmatization and discrimination	➢ None	➢ None
People living with HIV/AIDS	➢ Psychological trauma due to stigmatization and discrimination ➢ Loss of job	➢ Counselling services ➢ Social support by groups of PLHAS ➢ Occupational training ➢ Financial support for head start of self-employed business.	➢ None

The prevailing myths and misconceptions of the masses with regards to HIV/AIDS, STD and their manifestations would also disappear in an environment of social equity. Giving people the life saving and skill building knowledge is highly desirable for sustainability of any good plan. 'Staying in touch' is the cornerstone to success. Referral services need to be made

available to people so that they known how to go about for and advice or help or suggestions. Therefore, a holistic approach integrating HIV/AIDS information along with related referral services would bring about behavioural changes. Health care professionals as doctors, nurses, traditional healers and families should work hand-in-hand about in dealing with situations to bring healing. Apart from NGOs towards the needs of CSWS, effective policies aimed at rehabilitating sex-workers should be formulated into real action to contain sex trade and HIV. Lastly, we can say that, community participation information, knowledge, education and mass-media as a means of generating HIV/AIDS awareness needs to be fully harnessed as a vulnerable resource in achieving the "Millennium Achievement Goal", which propose to reverse the HIV/AIDS epidemic by 2015.

Suggestions:

"Prevention is better than cure and as a general rule, the most successful man in life is the man who has the best information". My paper is based on health hazards that a complete knowledge about health. If we have a complete knowledge about health than it is necessary to have complete knowledge or information about our problem or disease. HIV/AIDS is a problem of health along with the problem of social justice and human rights also. So, we should have a complete knowledge about HIV/AIDS, during the course of the study there are some suggestions evolved as follows.

1. **Implementation of psycho-educational programmes:-** A radical change is urgently required in the socialization process with the aim of putting an end to gender based differetion, which continues to be cause of most HIV infections worldwide.

In tackling the HIV/AIDS there are two interrelated important characteristics which could be discussed psychologically. The first is that at present the AIDS is neither curable nor preventable by medical methods. Secondary, it is preventable only by psychological methods.

The main psychological approach to tackle the AIDS is to change the attitudes of the present generation of high-risk people towards the premarital, permissive and promiscuous sexual behaviour. Medical approach is to cure the disease and the psychological approach is to prevent it. prevention is better than cure.

The AIDS is caused by the human sexual activities which are perverted and promiscuous in type. Therefore, it should be handled very carefully without hurting the feelings of normal and healthy human beings. Since the AIDS is a disease it should not be construed as purely a medical problem. The main aim of the preventive, measure is to change the attitudes and behaviour of the people. This approach is to create a sense of disgust or aversion for illegitimate and promiscuous sexual activities through acceptable methods. Socio-cultural norms that advocate equal rights and responsibilities of both men and women especially in matters related to sex and sexuality and condom use need to be formulated and implemented at the earliest.

2. **Implementation of cultural approach:-** India is nation of multiplicity of races, religions, cultures, castes and communities. But there was always unity in diversity and the Indian cultural and social life were built upon the strong restrictive principles and any attempt to break away from them met with serious consequences. The cultural values were part of the social life till very recently, in solving ever-day problems. The Health authorities in India believe that the Acquired Immune Deficiency Syndrome (AIDS) could be controlled by the ancient yogic practices. There are certain sophisticated yogic practices, which may protect our men and women from the HIV/AIDS. HIV/AIDS can be controlled by proper health education. The Indian cultural heritage with special reference to the yogic practices should be made as a part of National programme right from secondary education level to college level. There is no harm if the same educational system continued at all levels (B.A., B. Sc., etc.) in all Indian universities. If the programme is properly planned and sincerely implemented for a period of five years then it will have health tremendous effect upon the health practices of our society. It may also promote discipline among the student community, a sence of self-development and self-confidence.

3. **Raising Awareness about sexuality:-**

The word 'sex' is often used loosely to mean specific sexual acts or sexual behaviour in general. But in effect we tend to use the word 'sex' as a sort of hold all for the multiple aspects of what is sexuality.

At the base of sexuality is sex, which is the biological definition of a person's sexual identity as male or female. Sexuality also includes sexual behaviour, Which comprises both specific sexual acts and the social contexts within which these acts take place. It encompasses subjective sexual identity and the accompanying bodily processes, emotions and passions.

In India, sexuality education was unknown before the advent of the HIV/AIDS epidemic. The teaching style was didactic, stressing simple biology and avoiding direct reference to sexuality or other 'sensitive' aspects, and had no room for airing questions or doubts. Schools should be taking responsibility for sexuality education and parent should also responsible for giving sexual education to their children. School themselves still prefer biology textbook oriented 'Sex education' taught by reluctant teachers, rather than change over to a more thorough-going sexuality education and life skills training by trained counsellors.

So, in my point of view sexual education is must for every one for both boys and girls. Without getting information no one could understand about sex and sexuality and HIV/AIDS. So, every one should talk without any hesitation about this particular topic.

4. Review of laws related to sex workers or prostitution:- Many advanced countries legally recognize prostitution or sex-work as a work and have ensured certain basic rights of the commercial sex workers.

In India, we are still way back in accepting the basic rights of commercial sex-workers. In order to curb the spread of HIV, We need to review the laws

related to sex-workers or prostitutions, which are by and large oppressive for commercial sex-workers and hinder their ability to protect themselves from HIV/AIDS.

In India, the Fundamental Rights guaranteed to all citizens under the constitution, so that HIV/AIDS is one such social issue. HIV/AIDS has spurred a movement by some vulnerable groups and their allies for the repeal of the laws that criminalise them and for equal citizenship rights with the rest of society. There should be legal rights or legal approach of positive people. It should be fundamental rights for all. Our government is able to put an end to this social menace, emphasis and efforts should be focused on granting certain basic rights to the commercial sex-workers. For instance the right to negotiate for safe sex with clients can prove to be a major milestone in preventing new HIV infections.

5. **Enforcing innovative mandatory measures-** Enforcing specific preventive measures on a mandatory basis can be more effective in implementing public health strategies than solely relying on individuals for behavioural change. Thailand's 100 percent condom use programme which ensures condom use every time by all commercial sex-workers is an example of mandatory measure which has proved to be success. In India too, commercial sex-workers should be screened every fortnight for the presence of STD.

A mandatory measure requiring each truck driver, migrant workers and rikshaw puller to keep a safety kit comprising of bandage, dettol , cotton and a

condom in their vehicles should be enforced. Constant keeping of a condom in their safety kit would definitely increase condom-usage among these communities. Secondly it would also help truck drivers and rickshaw pullers to overcome the inhibitions of buying condoms.

In case of truck-drivers and rickshaw pullers, integrating AIDS education into School curriculum may not be very helpful because many truck drivers and rickshaw pullers do not have formal or high school education. Therefore, transport authorities issuing driving licenses to these drivers can help significantly in creating HIV/AIDS awareness amongst them. Every transport authority conducts an exam for each individual before issuing a driver's license to a person.

In India, illiteracy rate is as high as according to the latest report by census of India. Majority of the masses do not have adequate schooling and thus are not fully aware about sex, sexuality, STD, HIV/AIDS. To make matter worse boys and girls are married at early ages especially in rural areas. Each and every individual should be married only after acquiring a certificate from on local health center, which provides awareness in HIV/AIDS. This could avert a large number of HIV infections among our youth.

6. **Female condoms**- Development, distribution and marketing of effective female, condoms at affordable prices should be stressed on a priority basis. Female condoms can truly be a viable means of giving women the right to practice safe sex as and when they desire.

7. **Offering Incentives** – young masses could be motivated to attend the AIDS awareness programme held on certain dates at specific centres. For instance, a monetary incentive of even Rs. 10 per individual could attract a large number of poor masses and thus bring about HIV/AIDS awareness among them.

Psychologists can offer their services to the AIDS patients by way of providing suitable guidance, as:-

a. Creating awareness in the minds of the blood donors and blood receivers.

b. Making of the importance in the use of disposable needles for injections.

c. Providing appropriate sex education for the adolescent students and young adults.

d. Using pornographic material in the teaching to reduce, the curiosity of the body organs among the young adults.

e. Providing satisfactory answer about sex functions and about psychological health to the concerned individuals.

f. Explaining about the consequences of their abnormal function of sexual behaviour.

g. Educational training for the adjustment with the apposite sex related behaviour.

h. Teaching moral principles and disseminating right knowledge in sex related behaviour.

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